

Becky Strom
USEPA, Region V
230 South Dearborn Street
Chicago, IL 60604

April 25, 1985

Dear Ms. Strom:

With this letter Ohio EPA is sending a draft permit and statement of basis for Hukill Chemical Corporation (OHD001926740). In a separate correspondence with Robert Hukill, we requested revisions of pages 3 and 9 in the permit application to accurately reflect the 98,000 gallons of tank storage documented elsewhere in the application. Also, we advised Hukill that U.S. EPA may require an approvable remedial action plan prior to final permitting.

We recommend that this draft permit be processed and issued in that we feel this facility meets all the applicable requirements for a hazardous waste permit.

Sincerely,

A handwritten signature in blue ink, reading "Milton Rinehart", is written over the typed name.

Milton Rinehart
Division of Solid and Hazardous Waste Management

cc: Rose Freeman, USEPA
Tim Lawrence, DSHWM
Kris Coder, NEDO
File #OHD001926740

MR/jm

1343T-2

STATEMENT OF BASIS

Hukill Chemical Corporation
OHD001926740

This is a statement of the basis for the Draft Hazardous Waste Permit for the subject facility. It briefly describes the derivation of the conditions of the draft permit and the reasons for them. Under 40 CFR 124.7 (Title 40 of the code of Federal regulations, Section 124.7), the Statement of Basis is sent to the applicant and to any other person who requests it.

A. FACILITY DESCRIPTION

1. RCRA Activities

The facility is a chemical distribution and solvent recovery facility. As such, it needs RCRA hazardous waste permit for 55,000 gallons of storage in containers, a total of 98,000 gallons of storage in 8 tanks, and 1650 gallons/day of treatment. While most of the wastes are hazardous because they exhibit the characteristics of ignitability or are from, non-specific sources such as spent degreasing solvents, some of the wastes are specifically identified as toxic. The resalable products of Hukill's recycling/reclamation are distilled solvent and a supplement for fuel sold under the trade name of Chem Fuel.

2. Permit Actions Other Than RCRA

a. Water

NPDES Permit Number 31F00036

b. Air

c. Other Federal Acts Considered

Hukill Chemical Corporation will not require other permits to satisfy any other Federal acts. The facility will not have any adverse effect on the historical, architectural, archeological or cultural characteristics of the properties either listed or eligible for listing on the National Register for Historical Places.

B. PERMIT APPLICATION

The permit application cited herein is the November 9, 1982 application along with any subsequent amendments.

C. PURPOSE OF THE PERMITTING PROCESS

The purpose of the permitting process is to afford the United States Environmental Protection Agency (U.S. EPA), interested citizens and other governmental agencies the opportunity to evaluate the ability of the applicant to comply with the applicable hazardous waste management requirements under the Resource Conservation and Recovery Act (RCRA). The U.S. EPA is required to prepare a draft permit which sets forth in one concise document all the applicable requirements with which the Agency intends to require the Permittee to comply during the ten year duration of the permit.

D. PROCEDURES FOR REACHING A FINAL DECISION

Under Section 7004(b) of RCRA and 40 CFR §124.10, the public is given forty-five days to review the application and comment on the draft permit conditions prior to EPA taking any final permitting action on the application for a hazardous waste management permit. The comment period will begin on the date of publication of the public notice in a major local newspaper of general circulation. When the Regional Administrator of the U.S. EPA makes his final permit decision, notice will be given to the applicant and each person who has submitted written comments or requested notice of the final permit decision. If none of the comments received requested a change in the draft permit conditions, the permit will become effective immediately upon issuance of the permit. If comments received during comment period requested changes in the draft permit conditions then the final permit will become effective thirty (30) days after service of notice of the decision or at a later date if review is requested under 40 CFR §124.19.

The issuance of a Hazardous Waste Permit will be coordinated by both U.S. EPA and the Ohio Environmental Protection Agency (OEPA). At this time each Agency has regulations which require a permit to be issued for all facilities which treat, store, or dispose of hazardous waste. If the State receives Phase II interim authorization for the hazardous waste program, the State will assume the administration of the Federal hazardous waste permitting program and this permit.

E. BRIEF SUMMARY OF THE PERMIT CONDITIONS

This Section provides a brief summary of the permit conditions in the draft permit. The column titled "Regulation" provides the regulatory authority for the permit condition specified in the column titled "Permit Condition."

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (40 CFR)</u>
I. STANDARD CONDITIONS		
I.A.	Effect of Permit	§270.4 & 270.30(g)
I.B.	Permit Actions	§270.30(f), 270.41, §270.42, 270.43, §264.112 & §264.343(d)
I.C.	Severability	Standard Practice
I.D.1.	Duty to Comply	§270.30(a)
I.D.2.	Duty to Reapply	§270.30(b) & 270.10(h)
I.D.3.	Permit Expiration	§270.51
I.D.4.	Need to Halt or Reduce Activity not a Defense	§270.30(c)
I.D.5.	Duty to Mitigate	§270.30(d)
I.D.6.	Proper Operation and Maintenance	§270.30(e)
I.D.7.	Duty to Provide Information	§270.30(h) & §264.74(a)
I.D.8.	Inspection and Entry	§270.30(i)
I.D.9.	Monitoring and Records	§270.30(j)
I.D.10.	Reporting Planned Changes	§270.30(l)(1)
I.D.11.	(Not Used)	
I.D.12.	Anticipated Noncompliance	§270.30(l)(2)
I.D.13.	Transfer of Permits	§270.30(l)(3), 270.40 & 264.12(c)
I.D.14.	Compliance Schedules	§270.30(l)(5) & 270.33
I.D.15.	Twenty-Four Hour Reporting	§270.30(l)(6) & 264.56(d)(i)(j)

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (40 CFR)</u>
I.D.16.	Other Noncompliance	§270.30(1)(10)
I.D.17.	Other Information	§270.30(1)(11)
I.E.	Signatory Requirement	§270.11 & 270.30(k)
I.F.	Confidential Information	§270.12
I.G.	Not Used	
I.H.	Documents to be Maintained at Facility Site	§264.13(b), 264.16(d), §264.53(a), 264.122(a), §264.142(a), 264.73, §264.15(b)

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (40 CFR)</u>
II. GENERAL FACILITY CONDITIONS		
II.A.	Design and Operation of Facility	\$264.31
II.B.	Required Notice (Not Applicable)	
II.C.	General Waste Analysis	\$264.13
II.D.	Security	\$264.14
II.E.	General Inspection Requirements	\$264.15
II.F.	Personnel Training	\$264.16
II.G.	General Requirements for Ignitable, Reactive and Incompatible Waste	\$264.17
II.H.	Location Standards (not applicable)	
II.I.1.	Required Equipment	\$264.32
II.I.2.	Testing and Maintenance of Equipment	\$264.33
II.I.3.	Access to Communications or Alarm System	\$264.34
II.I.4.	Required Aisle Space	\$264.35
II.I.5.	Local Authorities	\$264.37
II.J.1.	Implementation of Contingency Plan	\$264.51
II.J.2.	Copies of the Contingency Plan	\$264.53
II.J.3.	Amendments to the Contingency Plan	\$264.54
II.J.4.	Emergency Coordinator	\$264.55
II.K.	Manifest System	\$264.71, \$264.72, \$264.76, \$270.30(1)(7), \$270.30(1)(8)
II.L.1.	Operating Record	\$264.73
II.L.2.	Biennial Report	\$264.75, \$270.30(1)(g)

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (40 CFR)</u>
II.M.1.	Closure Performance Standard	\$264.111
II.M.2.	Amendment to Closure Plan	\$264.112(b)
II.M.3.	Notification of Closure	\$264.112(c)
II.M.4.	Time Allowed for Closure	\$264.113
II.M.5.	Disposal or Decontamination of Equipment	\$264.114
II.M.6.	Certification of Closure	\$264.115
II.N.	Closure Cost Estimate	\$264.142
II.O.	Financial Assurance for Facility Closure	\$264.143
II.P.	Liability Requirements	\$264.147
II.Q.	Incapacity of Owners or Operators, Generators or Financial Institutions	\$264.148

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (40 CFR)</u>
III.	STORAGE IN CONTAINERS	
III.A.	Waste Identification	\$270.13(1)
III.B.	Condition of Containers	\$264.171
III.C.	Compatibility of Wastes with Containers	\$264.172
III.D.	Management of Containers	\$264.173
III.E.	Containment	\$264.175
III.F.	Special Requirements for Ignitable or Reactive Waste	\$264.176
III.G.	Special Requirements for Incompatible Waste	\$264.177

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (40 CFR)</u>
IV. STORAGE IN TANKS		
IV.A.	Waste Identification	\$270.13(i)
IV.B.	Design of Tanks	\$264.191
IV.C.	General Operating Requirements	\$264.192
IV.D.	Special Requirements for Ignitable or Reactive Waste	\$264.198
IV.E.	Special Requirements for Incompatible Waste	\$264.199

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

Name of Permittee: Hukill Chemical Corporation

Facility Location: 7013 Krick Road, Bedford, Ohio

EPA Identification Number: OHD001926740

Effective Date:

Expiration Date:

Authorization Activities

Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery act of 1976, as amended (42 USC §6901 et seq., commonly known as RCRA) and regulations promulgated thereunder by the U.S. Environmental Protection Agency (EPA) (codified and to be codified in Title 40 of the Code of Federal Regulations), a permit is issued to Hukill Chemical Corporation (hereafter called the Permittee), to operate a hazardous waste treatment and storage facility located in Bedford, Ohio, at latitude 41:22:022 and longitude 081:31:045. You are authorized to conduct the following hazardous waste management activities.

<u>X</u> Storage	<u>X</u> Treatment	<u> </u> Disposal
<u>X</u> Container	<u> </u> Tank	<u> </u> Injection Well
<u>X</u> Tank	<u> </u> Surface Impoundment	<u> </u> Landfill
<u> </u> Waste Pile	<u> </u> Incenerator	<u> </u> Land Application
<u> </u> Surface Impoundment	<u>X</u> Other	<u> </u> Surface Impoundment

Applicable Regulations:

The conditions of this permit were developed in accordance with the applicable provisions of 40 CFR Part:

<u>X</u> 261	<u>X</u> 264, Subpart G	<u> </u> 264, Subpart L
<u>X</u> 262	<u>X</u> 264, Subpart H	<u> </u> 264, Subpart M
<u>X</u> 264, Subparts A-E	<u>X</u> 264, Subpart I	<u> </u> 264, Subpart N
<u> </u> 264, Subpart F	<u>X</u> 264, Subpart J	<u>X</u> 270
	<u>X</u> 264, Subpart K	

Permit Approval

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any attachments) and the applicable regulations contained in 40 CFR Parts 260 through 264 and 270 and 124 as specified in the permit. Applicable regulations are those which are in effect on the date of issuance of this permit. (See 40 CFR §270.32(c).)

This permit is based on the assumption that the information submitted in the permit application attached to the Permittee's letter dated November 9, 1982, and any subsequent amendments (hereafter referred to as the application) is accurate and that the facility will be constructed and operated as specified in the application. Any inaccuracies found in this information may be grounds for the termination or modification of this permit (see 40 CFR §270.41, §270.42 and §270.43) and potential enforcement action. The Permittee must inform EPA of any deviation from or changes in the information in the application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit is effective as of _____, and shall remain in effect until _____, unless revoked and reissued, or terminated (40 CFR §270.41 and .43) or continued in accordance with §270.51.

Issued this _____ day of _____

by _____
Basil G. Constantelos, Director
Waste Management Division

I. STANDARD CONDITIONS

A. EFFECT OF PERMIT

The Permittee is allowed to treat and store hazardous waste in accordance with the conditions of this permit. Any treatment or storage of hazardous waste not authorized in this permit is prohibited. Compliance with this permit constitutes compliance, for purposes of enforcement with Subtitle C of RCRA. Issuance of this permit does not convey property rights or any sort of any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Section 3013 or Section 7003 of RCRA, Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9606 (a), commonly known as CERCLA), or any other law providing for protection of public health or the environment.

B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 270.41, 270.42, and 270.43. The filing of a request for a permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated non-compliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.

C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

D. DUTIES AND REQUIREMENTS

1. Duty to Comply. The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such non-compliance is authorized by an emergency permit. Any permit non-compliance, other than non-compliance authorized by an emergency permit, constitutes a violation of RCRA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application, or other appropriate action.

2. Duty to Reapply. If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee shall submit a complete application for a new permit at least 180 days before this permit expires, unless permission for a later date has been granted by the Regional Administrator.
3. Permit Expiration. This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application (see 40 CFR 270.13 - 270.29) and through no fault of the Permittee the Regional Administrator has not issued a new permit as set forth in 40 CFR 270.51.
4. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
5. Duty to Mitigate. The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from non-compliance with the conditions of this permit.
6. Proper Operation and Maintenance. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facility or similar systems only when necessary to achieve compliance with the conditions of the permit.
7. Duty to Provide Information. The Permittee shall furnish to the Regional Administrator, within a reasonable time, any relevant information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this permit.
8. Inspection and Entry. The Permittee shall allow the Regional Administrator, or an authorized representative, upon the presentation of credentials or other documents as may be required by law, to:
 - (a) Enter at reasonable times upon the Permittee's premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this permit;

- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (d) Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

9. Monitoring and Records.

- (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846 July 1982; Methods for Chemical Analysis of Water and Waste EPA 600/4-79-020, March 1979; or an equivalent method as specified in the attached Waste Analysis Plan.
- (b) The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or record. These periods may be extended by request of the Regional Administrator at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.
- (c) Records of the monitoring information shall include:
 - (i) The date(s), exact place, and times of sampling or measurements;
 - (ii) The individual(s) who performed the sampling or measurements;
 - (iii) The date(s) analyses were performed;
 - (iv) The individual(s) who performed the analyses;

(v) The analytical technique(s) or method(s) used; and

(vi) The result(s) of such analyses.

10. Reporting Planned Changes. The Permittee shall give notice to the Regional Administrator as soon as possible of any planned physical alterations or additions to the permitted facility.
11. Certification of Construction or Modification. The Permittee may not commence _____ of hazardous waste at the facility until:
 - (a) The Permittee has submitted to the Regional Administrator by certified mail or hand delivery a letter signed by the Permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
 - (b)
 - (i) The Regional Administrator has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or
 - (ii) The Regional Administrator has either waived the inspection or has not within 15 days notified the Permittee of his or her intent to inspect.

[NOTE: This condition only applies to newly permitted facilities or to permitted facilities which have been modified.]
12. Anticipated Noncompliance. The Permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in non-compliance with permit requirements. Such notice does not constitute a waiver of the Permittee's duty to comply with permit requirements.
13. Transfer of Permits. This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to 40 CFR 270.41(b)(2) or 270.42(d). Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of 40 CFR Parts 264 and 270.
14. Compliance Schedules. Reports of compliance or non-compliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

15. Twenty-four Hour Reporting. The Permittee shall report to the Regional Administrator any non-compliance with the permit which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. This report shall include the following:
- (a) Information concerning the release of any hazardous waste which may endanger public drinking water supplies.
 - (b) Information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:
 - (i) Name, address, and telephone number of the owner or operator;
 - (ii) Name, address, and telephone number of the facility;
 - (iii) Date, time, and type of incident;
 - (iv) Name and quantity of materials involved;
 - (v) The extent of injuries, if any;
 - (vi) An assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and
 - (vii) Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the non-compliance and its cause; the periods of non-compliance (including exact dates and times); whether the non-compliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the non-compliance. The Permittee need not comply with the five day written notice requirement if the Regional Administrator waives the requirement and the Permittee submits a written report within fifteen days of the time the Permittee becomes aware of the circumstances.

16. Other Noncompliance. The Permittee shall report all other instances of non-compliance not otherwise required to be reported above, at the time monitoring reports, as required by this permit, are submitted. The reports shall contain the information listed in condition I.D. 15.
17. Other Information. Whenever the Permittee becomes aware that he failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Regional Administrator, the Permittee shall promptly submit such facts or information.
18. Submittal of Reports or Other Information. All reports or other information required to be submitted by the terms of this permit shall be sent to:

RCRA Activities
U.S. EPA, Region V
P.O. Box A3587
Chicago, Illinois 60690-3587

- E. Signatory Requirement. All reports or other information requested by the Regional Administrator shall be signed and certified as required by 40 CFR 270.11.
- F. Confidential Information. The Permittee may claim confidential any information required to be submitted by this permit in accordance with 40 CFR 270.12.
- G. Documents To Be Submitted Prior to Operation.
- H. Documents To Be Maintained at Facility Site. The Permittee shall maintain at the facility, until closure is completed and certified by an independent registered professional engineer, the following documents and amendments, revisions and modifications to these documents:
 1. Waste analysis plan as required by 40 CFR 264.13 and this permit.
 2. Personnel training documents and records as required by 40 CFR 264.16(d) and this permit.
 3. Contingency plan as required by 40 CFR 264.53(a) and this permit.
 4. Closure plan as required by 40 CFR 264.112(a) and this permit.

5. Cost estimate for facility closure as required by 40 CFR 264.142(d) and this permit.
6. Operating record as required by 40 CFR 264.73 and this permit.
7. Inspection schedules as required by 40 CFR 264.15(b) and this permit.

II. GENERAL FACILITY CONDITIONS

- A. Design and Operation of Facility. The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.
- B. Required Notice.
1. The Permittee shall notify the Regional Administrator in writing at least four weeks in advance of the date the Permittee expects to receive hazardous waste from a foreign source. Notice of subsequent shipments of the same waste from the same foreign source in the same calendar year is not required.
 2. When the Permittee is to receive hazardous waste from an off-site source (except where the Permittee is also the generator), he must inform the generator in writing that he has the appropriate permits for, and will accept, the waste the generator is shipping. The Permittee must keep a copy of this written notice as part of the operating record. (See Condition II.L.1.)
- C. General Waste Analysis. The Permittee shall follow the procedures described in the attached waste analysis plan, Attachment _____.
- D. Security. The Permittee shall comply with the security provisions of 40 CFR 264.14(b) and (C).
- E. General Inspection Requirements. The Permittee shall follow the inspection schedule, Attachment _____. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 40 CFR 264.15(c). Records of inspections shall be kept as required by 40 CFR 264.15(d).
- F. Personnel Training. The Permittee shall conduct personnel training as required by 40 CFR 264.16. This training program shall follow the attached outline, Attachment _____. The Permittee shall maintain training documents and records as required by 40 CFR 264.16(d) and (e).
- G. General Requirements for Ignitable, Reactive, or Incompatible Waste. The Permittee shall comply with the requirements of 40 CFR 264.17(a).
- H. Location Standards.

I. Preparedness and Prevention.

1. Required Information. At a minimum, the Permittee shall equip the facility with the equipment set forth in the contingency plan, Attachment _____ as required by 40 CFR 264.32.
2. Testing and Maintenance of Equipment. The Permittee shall test and maintain the equipment specified in the previous permit condition as necessary to assure its proper operation in time of emergency. Such testing and maintenance activities set fourth in the inspection schedule, Attachment_____.
3. Access to Communications or Alarm System. The Permittee shall maintain access to the communications or alarm system as required by 40 CFR 264.34.
4. Required Aisle Space. At a minimum, the Permittee shall maintain aisle space as required by 40 CFR 264.35.
5. Arrangements with Local Authorities. The Permittee shall attempt to make arrangements with State and local authorities as required by 40 CFR 264.37. If State or local officials refuse to enter into preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

J. Contingency Plan.

1. Implementation of Plan. The Permittee shall immediately carry out the provisions of the contingency plan, Attachment _____, and follow the emergency procedures described by 40 CFR 264.56 whenever there is a fire, explosion, or release of hazardous waste or constituents which threatens or could threaten human health or the environment.
2. Copies of Plan. The Permittee shall comply with the requirements of 40 CFR 264.53.
3. Amendments to Plan. The Permittee shall review and immediately amend, if necessary, the contingency plan as required by 40 CFR 264.54.
4. Emergency Coordinator. The Permittee shall comply with the requirements of 40 CFR 264.55, concerning the emergency coordinator.

K. Manifest System. The Permittee shall comply with the manifest requirements of 40 CFR 264.71, 264.72, and 264.76.

L. Recordkeeping and Reporting.

1. Operating Record. The Permittee shall maintain a written operating record at the facility in accordance with 40 CFR 264.73(a), (b)(1), (2), (3), (4), (5), (6), (7) and (8).

2. Biennial Report. The Permittee shall comply with the biennial report requirements of 40 CFR 264.75.

M. Closure.

1. Performance Standard. The Permittee shall close the facility as required by 40 CFR 264.111 and in accordance with the closure plan, Attachment _____.

2. Amendment to Closure Plan. The Permittee shall amend the closure plan in accordance with 40 CFR 264.112(b) whenever necessary.

3. Notification of Closure. The Permittee shall notify the Regional Administrator at least 180 days prior to the date he expects to begin closure.

4. Time Allowed for Closure. After receiving the final volume of hazardous waste, the Permittee shall treat or remove from the site all hazardous waste in accordance with the schedule specified in the closure plan, Attachment _____. After receiving the final volume of hazardous waste, the Permittee shall complete closure activities in accordance with the schedule specified in the closure plan, Attachment _____.

5. Disposal or Decontamination of Equipment. The Permittee shall decontaminate and/or dispose of all facility equipment as required by 40 CFR 264.114 and the closure plan, Attachment _____.

6. Certification of Closure. The Permittee shall certify that the facility has been closed in accordance with the specifications in the closure plan as required by 40 CFR 264.115.

N. Cost Estimate for Facility Closure. The Permittee's original closure cost estimate, prepared in accordance with 40 CFR 264.142(a), is specified in Attachment _____.

1. The Permittee must adjust the closure cost estimate for inflation within 30 days after each anniversary of the date on which the first closure cost estimate was prepared, as required by 40 CFR 264.142(b).
2. The Permittee must revise the closure cost estimate whenever there is a change in the facility's closure plan as required by 40 CFR 264.142(c).
3. The Permittee must keep at the facility the latest closure cost estimate as required by 40 CFR 264.142(d).

O. Financial Assurance for Facility Closure. The Permittee shall demonstrate continuous compliance with 40 CFR 264.143 by providing documentation of financial assurance, as required by 40 CFR 264.151, in at least the amount of the cost estimates required by permit condition II.N. Changes in financial assurance mechanisms must be approved by the Regional Administrator pursuant to 40 CFR 264.143.

P. Liability Requirements. The Permittee shall demonstrate continuous compliance with 40 CFR 264.147 and the documentation requirements of 40 CFR 264.151, including the requirements to have and maintain liability coverage for sudden and accidental occurrences in the amount of at least \$1 million per occurrence with an annual aggregate of at least \$2 million, exclusive of legal defense costs.

Q. Incapacity of Owners or Operators, Guarantors, or Financial Institutions.

The Permittee shall comply with 40 CFR 264.148 whenever necessary.

III. STORAGE IN CONTAINERS

- A. Waste Identification. The Permittee may store a total volume of 55,000 gallons of the following wastes in containers at the facility, subject to the terms of this permit:

D001	F004	U031	U121	U213
F001	F005	U037	U140	U220
F002	U002	U052	U154	U226
F003	U019	U080	U159	U239
		U112	U161	

- B. Condition of Containers. If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this permit.
- C. Compatibility of Waste with Containers. The Permittee shall assure that the ability of the container to contain the waste is not impaired as required by 40 CFR 264.172.
- D. Management of Containers. The Permittee shall manage containers as required by 40 CFR 264.173.
- E. Containment. The Permittee shall maintain the containment system in accordance with the requirements of 40 CFR 264.175 as specified in the attached plans and specifications, Attachment _____.
- F. Special Requirements for Ignitable or Reactive Waste. The Permittee shall not locate containers holding ignitable or reactive waste within 15 meters (50 feet) of the facility's property line.
- G. Special Requirements for Incompatible Waste.
1. Prior to placing incompatible wastes or incompatible wastes and materials in the same container, the Permittee shall comply with 40 CFR 264.17(b) as specified in Attachment _____.
 2. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material.
 3. The Permittee shall separate containers of incompatible wastes as indicated in the attached plans, Attachment _____, as required by 40 CFR 264.177(c).
 4. The Permittee must document compliance with III.G. (1) and (2) as required by 40 CFR 264.17(c) and place this documentation in the operating record (condition II.L.1).

IV. STORAGE IN TANKS

- A. Waste Identification. The Permittee may store a total volume of 98,000 gallons of the following hazardous wastes in tanks, subject to the terms of this permit:

D001	F004	U031	U112	U159	U226
F001	F005	U037	U121	U161	U239
F002	U002	U052	U140	U213	
F003	U019	U080	U154	U220	

- B. Design of Tanks. The Permittee shall contract, operate and maintain all tanks as required by 40 CFR 264.191, as specified in the attached plans and specifications, Attachment _____. The Permittee shall maintain the minimum shell thickness specified below at all times to ensure sufficient shell strength.

C. General Operating Requirements.

1. The Permittee shall protect tanks from accelerated corrosion, erosion or abrasion as required by 40 CFR 264.192(a), as specified in Attachment _____.
2. The Permittee shall prevent overfilling of tanks, as required by 40 CFR 264.192(b), by the method specified in Attachment _____.

D. Special Requirements for Ignitable or Reactive Wastes.

1. The Permittee shall not place ignitable or reactive waste in a tank unless the procedures described in Attachment _____ are followed, as required by 40 CFR 264.198(a).
2. The Permittee shall document compliance with IV.D.1. as required by 40 CFR 264.17(c) and place this documentation in the operating record (condition II.L.1).
3. The Permittee shall maintain buffer zones around covered tanks as specified in Attachment _____, as required by 40 CFR 264.198(b).

E. Special Requirements for Incompatible Wastes.

1. The Permittee shall not place incompatible wastes in the same tank or place hazardous waste in a tank that previously held an incompatible waste or material unless the procedures specified in Attachment _____ are followed, as required by 40 CFR 264.17(b).
2. The Permittee shall document compliance with IV.E.1 as required by 40 CFR 264.17(c) and place this documentation in the operating record (Condition II.L.1).

SIGNATURE PAGE

Signature: _____

Basil G. Constantelos, Director
Waste Management Division

Date: _____

1279T



RE: Hukill Chemical
OHD001926740
02-18-0315

JB
RECEIVED
NOV 27 1984
WASTE MANAGEMENT
BRANCH

November 14, 1984

Mr. Robert L. Hukill
Hukill Chemical
7013 Krich Road
Bedford, Ohio 44146

Dear Mr. Hukill:

I would like to restate Part B Adequacy Comment #7 from Milton Rinehart's October 31, 1984 letter. In Comment #7 Milton told you that the Ohio EPA has determined that Chem-Fuel is a hazardous waste because it is derived from listed hazardous waste. Chem-Fuel will, therefore, remain a listed hazardous waste until delisted. The transportation and storage of Chem-Fuel prior to recycling is regulated according to the Ohio Administrative Code Section 3745-51-06. This regulation (OAC 3745-51-06) requires compliance with the generator standards (Chapter 3745-52), the transporter standards (Chapter 3745-53), the general facility standards (Chapters 3745-54, 55, 56, and 57), and the Ohio hazardous waste permit requirements as concern storage facilities. This is the situation with your Chem-Fuel; its reuse is not regulated, but its storage and transportation prior to reuse are fully regulated. I have explained this situation in a letter to J&L Steel Company dated October 23, 1984. They are now aware that the waste derived Chem-Fuel must be received under manifest and stored under a storage permit.

These requirements are standard for hazardous waste derived fuel programs in Ohio. I expect that U.S. EPA, Region V would agree with my evaluation of your situation, if asked. The letter from Region V on Chem-Fuel which has been referenced by J&L Steel is not addressed to J&L Steel or Hukill. It obviously evaluates a situation which doesn't apply at J&L Steel or your facility.

If you have any questions, please call me at (614) 462-8419.

Sincerely,

Randall Marshall

Randall Marshall
Environmental Scientist
Tech. Assistance and Waste Management Section
Division of Solid and Hazardous Waste Mgt.

RM/mm

cc: Milton Rinehart
Tom Carlisle
Paula Cotter
Chris Coder, NEDO

Dave Wertz, NEDO
Jim Mayka, U.S. EPA, Region V
Ted Reese, Cadence Chemical Resources



Re: Hukill Chemical
OHD001926740/02-18-0315
Cuyahoga County



Mr. Robert L. Hukill
7013 Krick Road
Bedford, Ohio 44146

October 31, 1984

Dear Mr. Hukill:

Attached to this letter are additional adequacy comments on the RCRA Part B permit application submitted by Hukill Chemical in September 1982. These additional comments supplement those sent in our May 15 and July 16, 1984 letters.

These comments require a few important changes in the permit application. These changes need to be made before a draft permit can be prepared for Hukill Chemical. Consequently, we request your response within sixty calendar days of the date of this letter.

Thank you in advance for your cooperation.

Sincerely,

Milton Rinehart
Engineering Section
Division of Solid and Hazardous Waste Management

MR/pam

Attachment

1024T

cc: Kris Coder, NEDO
cc: Ron Lillich, USEPA Region V
cc: Jim Mayka, USEPA Region V
cc: Randy Marshall
cc: File 02-18-0315

1. Does Hukill have a centralized operating record as required in 264.73? If so, please revise permit application to show how this operating record meets regulatory requirements or identify where this information is given in the application. If not, institute a centralized operating record and revise the permit application to show how it meets regulatory requirements.
2. Delete the statement "Materials whose properties vary from the suggested ranges may be acceptable. All inquiries will be considered." from page 30AA. Or add the statement "Ohio EPA has determined that ChemFuel is a hazardous waste derived from the still bottoms from solvent recovery. The transportation and management of ChemFuel must be properly manifested and permitted as required in Ohio law." This deletion or addition must not only be on the "ChemFuel Product Specification" sheet in the permit application (pg. 30AA) but also on all copies of this sheet distributed to customers and potential customers.
3. The closure cost estimate must reflect the possibility of removal of contaminated soils, clean up of containment areas, decontamination of processing equipment and so forth.
4. F004 waste code should be included on page 23.
5. Worker safety must include a respirator, apron, boots, etc. during drum pumping, sampling and deheading operations. A respirator use program (OSHA) must be established (Sec. 270.14(8)(v)).
6. While pages 36 and 37 indicate that the maximum number of drums in the free liquid and the non-free liquid storage areas are 648 and 916 respectively, Hukill will not be permitted to store more than 1,000 drums combined total of both. (This comment requires no response.)
7. Ohio EPA has determined that ChemFuel is a hazardous waste derived from the still bottoms from solvent reclamation. Therefore, the necessary structural data, inspections, recordkeeping, and all other applicable requirements of 40 CFR Parts 264 and 270 for the ChemFuel tanks must be included in the permit application. Also, ChemFuel Product must be manifested.
8. The two process feed tanks which sometimes contain hazardous waste for longer than 24 hours (over the weekend) must be managed so that no waste is stored over 24 hours or these tanks must be included in permit as storage tanks. Permit application must be changed to reflect, (1) less than 24 hour storage or, (2) addition of these two tanks as hazardous waste storage tanks.
9. The wastes accepted for use in the Chem Fuel process must be subjected to the same testing as Chem Fuel "product". Please modify the Waste Analysis Plan accordingly.
10. Pg. 30AA Add "inorganic and," after "caustics or" in the first line of the last statement on this page.
11. Pg. 30Z Section C-30 Item Number 3 - Clarify that the low BTU wastes referred to are those with greater than 5,000 BTU/lb by adding a "greater than" sign inside the parenthesis before 5,000.

Rec'd 1/7/85

HUKILL CHEMICAL CORPORATION

7013 KRICK ROAD • BEDFORD, OHIO 44146 • 216/232-9400

Over Thirty-Five Years of Quality Products and Services

December 27, 1984

Mr. Milton Rinehart ES, DSHWM
OEPA
361 E. Broad Street
Columbus, Ohio 43216

Dear Mr. Rinehart:

In our last phone conversation, you asked me if we could complete all of the questions on technical requests dated October 31, 1984. I said that I would let you know on what areas we would need more time.

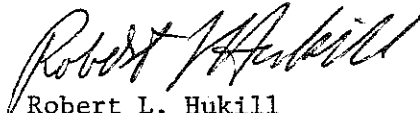
Of the 11 requests, numbers 3 and 7 will require more time.

Number 3 has to do with closure costs which will be affected by the decision on Chem Fuel. Number 7 also has to do with Chem Fuel determination. At this point, the Chem Fuel decision is on hold pending further information from OEPA and Cadence.

If you have any questions regarding this, please give me a call.

Very truly yours,

HUKILL CHEMICAL CORPORATION



Robert L. Hukill
Vice President
General Manager

RLH/sj

RECEIVED
OHIO EPA

DEC 31 1984

DIV. of SOLID & LIQ. WASTE MGT.

HUKILL CHEMICAL CORPORATION

7013 KRICK ROAD • BEDFORD, OHIO 44146 • 216/232-9400

Over Thirty-Five Years of Quality Products and Services

December 28, 1984

RECEIVED
OHIO EPA

DEC 31 1984

DIV. of SOLID & HAZ. WASTE MGT.

Mr. Milton Rinehart ES. DSHWM
Ohio EPA
361 E. Broad Street
Columbus, Ohio 43216

Dear Mr. Rinehart:

Enclosed are the responses to your additional comments. We are going to include our two feed tanks as HW storage tanks, but need an additional 45 days to get all the necessary information together.

The issue of Chem Fuel Product is on hold and that puts #7 on hold.

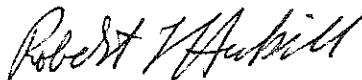
We are taking steps to have an OSHA respirator use program.

I am hopeful that in 45 days we can have all these items completed and in the application.

If you have any questions, please give me a call.

Very truly yours,

HUKILL CHEMICAL CORPORATION



Robert L. Hukill
Vice President
General Manager

RLH/sj

Enclosure

Adequacy Comments to Facility
Letter Dated October 31, 1984

1. A section on the Operating Record has been inserted on page 12A.
2. Page 30AA has been revised.
3. Page 98 has been revised to include decontamination costs, as well as, the two feed tanks. Also the number of storage tanks has been changed to fit with the rest of the permit.

The inclusion of the two Chem Fuel Product tanks remains on hold until the status of Chem Fuel Product is resolved.

4. Page 23 has been revised to include F004.
5. We have taken steps to set up a respirator use program based on test data. In the mean time, employees will be required to use a respirator while pumping out and working around open drums.
6. No response required.
7. The Chem Fuel Status is presently on hold.
8. We will include these two feed tanks as hazardous waste storage tanks. We may hold material more than 24 hours, over weekends in particular. We will have prints drawn up and testing on the tanks completed.

Because we initially felt that we would not include these tanks as Hazardous Waste storage tanks, we are now just starting to gather the information required. We estimate that this task will take 45 days to complete.

9. Pages 26, 28, and 30 have been revised. (See Exhibit A)
10. Page 30AA has been revised.
11. Page 30Z has been revised.

9. The Chem Fuel Product specification sheet and the analyses shown on it, page 30AA, are more representative of a typical composite analysis than a true specification. The only analyses currently requested on any shipment by Cadence Chemical or LTV Steel are the following:

1. BTU per pound.
2. % Solids by evaporation.
3. Viscosity in cps.
4. Weight per gallon (specific gravity)
5. Weight percent Chloride ion in combustion residues.

In reveiwing the waste analysis plan, only % solids by evaporation has been deleted.

This test has been added to the Waste Analysis Plan on pages 26, 28, and 30.

Also, quarterly, a composite sample of all Chem Fuel material is completely analyzed by Cadence Chemical. A copy of such an analysis can be found on pages 30JJ and 30KK. This analysis incorporates most items on the Chem Fuel Specification Sheet.

B-5 Facility Operating Records

A written operating record is maintained at Hukill Chemical Corporation as required by 40 CFR - 264.71. This record will be maintained until the closure of the facility.

B-5a Location

The operating record is located in the front office in a four drawer file. A more detailed set of analytical information is located in the lab in a four drawer file. The manifest numbers can be used to cross reference these two files.

B-5b The following information is recorded as it becomes available and is maintained in the operating record until closure of the facility.

- B-5b. 1. A copy of a description and the quantity of each hazardous waste received is maintained in an individual customer file which contains a copy of the signed manifests and the analysis report form from the lab. These can be cross referenced to Job Orders by Job Order Number for dates of processing and disposition.
- B-5b. 2. An inventory of all Hazardous waste is maintained. Bulk storage tanks are inspected and inventoried each day. A daily inventory log is maintained which identifies the type of waste and physical state. Drum storage inventory is maintained which identifies the customer code, the amount of drums, the manifest number, type of waste and physical state.
- B-5. 3. Records and results of waste analyses are maintained in the customer files in the operating record both in the front office and the lab. This information is on the Lab Sample Analysis Report. In the lab, all the results of the Gaschromatigraph are kept.
- B-5. 4. The summary reports and details of all incidents that require implementing the contingency plan are maintained in the front office file.
- B-5. 5. The records and results of the daily and weekly inspections are kept in the front office file. These records are kept for 3 years.
- B-5. 6. All closure cost estimates are filed in the front office file.
- B-5. 7. All personnel training records are kept in the front office operating record file.

Basis for Hazardous Designation

Current Federal interpretation of the definition of Hazardous Wastes found in Part 261 of the Hazardous Waste Regulations exclude from non-specific source lists those halogenated or non-halogenated waste solvents which have been blended prior to use in a process. For this reason it has been our practice to list more than one industry and EPA hazardous waste number when describing our wastes from customers on shipping manifests. For example:

1. Paint Manufacturing Industry - EPA Hazardous waste number(s)
F003, F005
Reason: a. Flash point \leq 140°F Ignitable (I)
b. Sub-part 261.31 list typical solvents in this industry as toxic (T) as well as ignitable (I).
2. Paint using industry - Group A EPA Hazardous waste number(s)
F003, F005
Reason: a. Flash point \leq 140°F Ignitable (I)
b. Sub-part 261.31 list typical solvents in this industry as toxic (T) as well as ignitable (I).
3. Paint using industry - Group B EPA Hazardous waste number(s)
F002
Reason: a. Flash point $>$ 140°F (not ignitable).
b. Sub-part 261.31 list typical solvents in this industry as toxic(T).
c. Not a metal cleaning operation.
4. Metal cleaning industry - EPA Hazardous waste number(s)
F001, F004
Reason: a. Flash point $>$ 140°F (not ignitable).
b. Sub-part 261.31 list typical solvents in this industry as toxic (T).
c. Not a paint operation.
d. Special cleaners that are toxic (T).
5. Chemical using/generating industry - 261.33 (f) 261.21 (b)
EPA Hazardous designation (for example given - Butyl Acetate and Toluene)

U220 Toluene (toxic 261.33 (f))
D001 Not listed but ignitable 261.21 i.e. Butyl Acetate

b. Specific gravity

This analysis is used to verify that waste is as manifested when it is picked up from the generator and when it is received at the facility. It also provides a measure of weight/force for the designing and proper use of tanks and containers.

c. Flash point

Flash point is used to verify waste ignitibility (I) characteristics.

d. Acid Point Valve (APV)

Analysis will identify corrosive potential of waste. Even slightly basic or acidic materials which may or may not be compatible with certain metals are noted and provisions made for safe transportation and handling.

e. Distillation range, yield, moisture content

These analyses are used to determine economic feasibility of recycling a dirty solvent.

f. Heat of Combustion

In order to certify that a material, either a dirty solvent or a distillation by-product, is a suitable fuel, the heat of combustion is determined.

g. Ph

A measure of acidity or basicity in an aqueous medium. The test is used to check distilled water wastes.

h. Compatibility

Whenever wastes are evaluated for reclaiming or for Chem Fuel, the waste is evaluated for its compatibility with process tanks, equipment, storage tanks and other wastes.

Wastes that are processed (reclaimed) are checked for compatibility with process tanks and equipment, storage tanks and equipment. Still bottoms generated from the reclaiming operation are checked for compatibility with a typical Chem Fuel product upon mixing.

Wastes that are processed into Chem Fuel are checked for compatibility with storage tanks, equipment and for compatibility with typical Chem Fuel product. (For more detail see Chem Fuel Section).

i. Chloride in Neutralized Combustion residues

The % Chloride in combustion residue samples is analyzed so that fuel products can be properly blended assuring that the 5% maximum chloride content in Chem Fuel products is not exceeded.

j. % Solids

A sample of waste is evaporated until free liquid is removed and the % solids is determined by weight difference.

10 grams of waste are weighed into an aluminum dish. The dish is placed on a hot plate and free liquid is evaporated. The weight of the residue is divided by the original sample weight.

j. Yield

Yield is calculated as a percentage of sample obtained distillate.

k. Moisture content

Moisture content is determined by gas chromatography and/or Karl Fisher.

l. Ph

Ph is determined using Ph paper or calibrated ph meter.

m. Compatibility

By examining component analyses, we can, with our knowledge of chemistry, avoid mixing or segregate materials that might not be compatible. Acidic materials are neutralized. Materials that when mixed may cause a precipitate due to incompatible solvent systems are kept segregated. (See Chem Fuel section C-3)

C-2C

Sampling Methods

A. Container sampling (drum)

1. Each container received at the facility is stenciled with the following code.
 - a. Hukill internal customer number.
 - b. Hazardous waste manifest number.
 - c. The number of drums in the shipment.
 - d. Optionally, an abbreviation of the major component.
 - e. Internal job/work order number (if for reclaiming).
2. The sampler then segregates the drums into groups with similar contents.
3. A composite sample is made for each group by sampling a representative number of barrels in that group.
4. In lieu of a Coliwasa - samples of containerized wastes are sampled in a 4 Oz. bottle-narrow mouthed, (i.e., $\frac{1}{2}$ " dia), glass bottle attached to a rigid wire approximately 24" long. By feeding the bottle down through the drum such that air is displaced from the bottle at a steady rate, a representative sample of the waste material in the drum is obtained. We have found this method of sampling to be accurate and much more desirable from a spill, and housekeeping aspect than the cumbersome Coliwassa method. Occasionally when drums are known to contain significant "heels" of solid pigments, resins, dirt, etc. a drum pump will be used to extract material at the liquid/solid interface. This

3. Distillate 1 duct acid pt. value.
4. Solvent component analysis - G.C.
5. Heat of combustion and % Chloride in combustion residue - dist. bottoms.
6. Heat of combustion and % Chloride in combustion residue - distillate (can be estimated from components)
7. Chem Fuel compatibility
8. Viscosity
9. Unusual odor.

Frequency - All nine parameters checked every time on every sample.

B. Mandatory tests for all Hazardous Waste Inbound material for Chem Fuel.

1. Heat of combustion and % Chloride in combustion residues - bulk stream.
2. Solvent component analysis - G.C.
3. Viscosity.
4. Visible solid particles.
5. Flash point.
6. Chem Fuel compatibility.
7. Odor.
9. Specific Gravity
8. Acid point value of solvent component.
10. % Solids by Evaporation

Frequency - All eight parameters checked every time on every inbound shipment, see exhibits C-16 through C-19 for actual examples of this analysis. (Section C-3)

C. Mandatory Tests for Hazardous Wastes Inbound for Solvent Reclamation.

See exhibits C-2 through C-7 for examples.

1. First time customers - First and second shipments
 - a. Repeat section A analysis items completely.
2. Repeat reclaiming customers - Minimum check
 - a. Visual inspection.
 - b. Flash point.
3. Repeat reclaiming customer - every three months
 - a. Repeat procedure under Section A. analysis completely

In cases where the mixing compatibility test yields a negative result, per the four criteria listed on the previous page, it is the responsibility of the chemist and process engineer to determine the severity of the negative result(s) and make a decision on whether or not to accept the waste. In cases where heat and or gas evolution is noted, the material will be rejected. When the results involve viscosity increases or solids precipitation, the extent to which the viscosity increases or the volume percentage of solid precipitation occurs is taken into account. In cases where the waste in question is a still bottom from the recovery of a desirable solvent, it is possible to segregate the waste into drums or bulk for proper disposal at an offsite facility.

C-3D

Blending of Wastes

Typical situations where blending of wastes is necessary in the processing of Chem Fuel are:

1. Mixing of a viscous waste with recovered Hukill solvent in order to lower viscosity.
2. Mixing of waste with a BTU value that is in excess of the minimum Chem Fuel BTU specification with a waste that has a greater 5,000 BTU/lb. but less than 10,500 BTU/lb. The result is a Chem Fuel product with a proper BTU value.
3. Again upgrading the low ($\geq 5,000$ BTU/lb.) BTU waste with a Hukill owned reclaimed solvent in order to produce a Chem Fuel product with the proper BTU specification.

C-3E

Directing of Hazardous Waste Flow

All Chem Fuel materials, either still bottoms, dirty solvent, or recovered distillates are checked from the representative inbound sample to see if the waste, as shipped in, matches not only the manifest (flash point, compatibility, component analysis) but also for the heat of combustion and viscosity. The Process Engineer or Chemist may recommend exclusion of an entire load of material or any distillation product (Distillate or Distillate bottoms) of the load from Chem Fuel. Examples of exclusion or rejections would be:

1. BTU value below the minimum acceptable level - 5,000 BTU/lb.
2. BTU value below pre-shipment sample value.
3. Viscosity significantly higher - non-pumpable.
4. Waste not compatible with Chem Fuel.
5. Evidence of free water phase in material.

Again please find sample analyses of incoming potential Chem Fuel streams.

(Exhibit C-16 through C-19)

HUKILL CHEMICAL CORPORATION

7013 KRICK ROAD • BEDFORD, OHIO 44146 • 216/232-9400

Over Thirty-Five Years of Quality Products and Services

CHEM FUEL PRODUCT SPECIFICATIONS

<u>PARAMETER</u>	<u>LIMITS</u>
1. Physical State @ 60°F	Low viscosity blend of pumpable liquid hydrocarbon solvents with suspended solids.
2. Heat of Combustion	11,000 BTU/# Min. 11,700 BTU/# Average
3. Ash Content	10% by weight or less
4. Solids	Maximum - 40%
5. Suspended Particle Size	20 Mesh (0.331 inches)
6. Viscosity	Maximum - 300 cps @ 72° F- Comparable to #4 Fuel Oil
7. Moisture Content	No Free Water - 5% contained water by weight
8. Heavy Metals	Less than 0.3% by weight Lead - 1300 ppm.
9. Chlorine Content	Maximum 3% by weight Average 2.5% by weight
10. Sulphur Content	2% by weight or less
11. Corrosion to Carbon Steel	None
12. Flash Point	Flammable 100°F
13. Weight per Gallon	7.5#/gallon to 9.0#/gallon
14. Compatibility	Sample Required

Unacceptable materials include inorganic acids or caustics or inorganic and organic cyanides, lachramates or mercaptans. No PCB's, insecticides, pesticides, herbicides or other severely toxic, poisonous, explosive, reactive or radioactive materials will be considered.

Exhibit C-15

TEI ANALYTICAL, INC.

450 SOUTH NORTHWEST HIGHWAY • PARK RIDGE, ILLINOIS • 60068 • 312/696-2070

December 14, 1983

LABORATORY REPORT #0809

Page 5 of 8 pages

Mr. Mike Benoit
Cadence Chemical Resources, Inc.
P. O. Box 770
Michigan City, Indiana 46300

Samples received
November 22, 1983

[TEI-16039.05] HUK - Composite of Chem fuel samples from last
3 months 10/14/83

Total Chlorine, %	2.70
Arsenic, ppm	< 1.0
Mercury, ppm	0.20
Boron, ppm	1.5
Cadmium, ppm	9.8
Magnesium, ppm	113
Zinc, ppm	204
Silicon, ppm	315
Copper, ppm	45.2
Nickel, ppm	2.8
Manganese, ppm	7.0
Calcium, ppm	135
Molybdenum, ppm	5.6
Cobalt, ppm	8.3
Aluminum, ppm	78.9
Titanium, ppm	798
Vanadium, ppm	< 1.0
Chromium, ppm	67.3
Iron, ppm	232
Lead, ppm	271
Barium, ppm	170
Carbon, %	66.61
Hydrogen, %	9.89
Oxygen, %	14.89
Nitrogen, %	0.80

TEI ANALYTICAL, INC.

460 SOUTH NORTHWEST HIGHWAY • PARK RIDGE, ILLINOIS • 60068 • 312/696 2070

December 29, 1983

LABORATORY REPORT

#0790

Page 5 of 8 pages

Mr. Mike Benoit
Cadence Chemical Resources, Inc.
P. O. Box 770
Michigan City, Indiana 46360

Samples received
November 22, 1983

[TEI-16039-05] HUK - Composite of Chem Fuel. Samples from last
three months 10/14/83

Chlorinated Pesticides, ug/g	< 1.0
PCB's, ug/g	< 0.1
Dioxins, ug/g	< 0.1

Note: Results based on spike recovery of 86%

g. e. Marks

I-4 Closure Cost Estimate

Schedule A Continued

CURRENT COST ESTIMATE FOR FACILITY CLOSURE
HUKILL CHEMICAL CORPORATION
January, 1985

TANKS

<u>Number</u>	<u>Capacity in Gallons</u>	<u>Total Gallons</u>
5	14,000	70,000
1	17,000	17,000
2	6,000	12,000
		<u>99,000</u>

Disposal Cost

Solids	5,000	gallons - clean out tanks	\$ 5,000
		- drum disposal, 100 drums @\$100. each	10,000
Liquid	94,000	gallons -	@ .20 each 18,800
	<u>99,000</u>	gallons	

CONTAINERS

<u>Number</u>	<u>Capacity in Gallons</u>	<u>Total Gallons</u>
1,000	55	<u>55,000</u>

Disposal Cost

Solids	2,750	gallons - drum disposal, 50 drum @\$100. each	\$ 5,000
Liquid	52,250	gallons -	@ .20 each 10,450
	<u>55,000</u>		

DECONTAMINATION

Contaminated Soil	5,000
Clean Up Containment areas	3,000
Decontamination of Equipment	2,000

CONTINGENCY

10,000

Closure Cost 69,250

SEP 4 1984

Part B-Response to

Adequacy Comments to Facility
Letter dated July 16, 1984

DIV. of SOLID & HAZ. WASTE MGT.

Section A

- 1.c This was answered in my Part B-Response to Adequacy Comments to Facility Part A Section A-1c. We increased D001 because we increased our distillation capacity in the summer of 1982.

Section C

1. The typographical errors in the F002 waste description have been corrected.
2. The F004 wastes have not been handled at the facility in our recent history. We have, however, included F004 wastes in our discussion on the chance that we will handle this type of waste in the future.
3. Section 251 has been changed to 261 on page 17.
4. A comprehensive list of U-Group wastes have been listed in a modified Part A permit.
5. The less than and greater than signs to the flashpoints on page 23 have been added.
6. Bulk sampling is described on page 30B.

Section D - Containers

1. A description of the solidification process used to produce waste drums containing no free liquid and the method by which they are inspected can be found on page 37A.
2. The description of an "extra hazard class" sprinkler system is really a misnomer. It was an expression coined by a former consultant. This terminology has been deleted from pages 34 and 64.

Tanks

1. Minimum shell thickness for decommission is addressed on page 39. The method for testing is ultrasonic, again described on page 41.
2. The information on design operating temperature and pressure for tanks, as well as, specific gravity of liquids and maximum height of liquid in tanks was provided on pages 38, 39, 40 and 41.
- 3 and 4. The results of recent ultrasonic testing on the hazardous waste storage tanks are included on pages 66J through 66AA. We are in the process of obtaining engineering drawings for our tanks which will show that they meet acceptable flammable liquid storage standards. These will be completed no later than November 1, 1984. They will be forwarded as soon as possible.

General

1. The decision making process in the Waste Analysis Plan is addressed thoroughly on page 24. Criteria for load rejection is addressed on page 302 in section C-3E.

053-18

2. It is felt that a thorough discussion of the Chem Fuel process and how still bottoms are incorporated into it can be found in Section C-3.
3. Please note that analysis of Chlorides in Parr Bomb combustion residues has been added to the waste analysis plan. (See Section C-2.)
4. The specification for Chloride content in Chem Fuel products has been clarified to reflect the 5% maximum Chloride content allowable. (See Section C-3.)

Section F

1. page 52. We have never felt the need to provide visitors with passes because all visitors are accompanied by an employee while on the premises.

Section G

1. page 77 Tank V-114 has been set aside for containing of large spills.
(see page 77 G-45.)
2. page 78-79 The fire alarm is located outside the lunch room. It is accessible to all employees. The phone locations have been added to page 79A. Fire Brigade equipment is located in Emergency Supply Cabinets located in the East and West Warehouses. (See pages 79 and 79A). There is only one fire hydrant on the premises.
3. page 84 I have changed General Training to Initial Training in the Contingency Plan and emergency clean up has been added. (See page 84 A III. b).
4. page 85 Statements B and C have been rewritten.
5. page 84 The training within six months has been added. (See page 84 H1b A.I f.).

II. PROCESSES (continued)

SPACE FOR ADDITIONAL PROCESS CODES OR F
INCLUDE DESIGN CAPACITY.

DESCRIBING OTHER PROCESSES (code "T04")

FOR EACH PROCESS ENTERED HERE

See Section D of Part B application

#3.) Solidification Process - Under present operating conditions we would produce 250 gallons of solid material per day but actual daily capacity in an 8 hour day is 1650 gallons.

See Section D of Part B Application for more detail.

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V. DESCRIPTION OF HAZARDOUS WASTES

EPA HAZARDOUS WASTE NUMBER - Enter the four-digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four-digit number(s) from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

ESTIMATED ANNUAL QUANTITY - For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

UNIT OF MEASURE - For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE CODE
POUNDS P
TONS T

METRIC UNIT OF MEASURE CODE
KILOGRAMS K
METRIC TONS M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

I. PROCESSES

1. PROCESS CODES:

For listed hazardous wastes: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

Notes: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.

2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.

3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

SAMPLE FOR COMPLETING ITEM IV (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES	
				1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	754	900	P	T 0 3 D 8 0	
X-2	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
X-4	D 0 0 2				included with above

d from page 2.
Photocopy this page before completing if you have more than 26 wastes to list.

F. Approved OMB No. 158-SB0004

A. I.D. NUMBER (enter from page 1)

H D 0 0 1 9 2 6 7 4 0

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DUP

DUP

DESCRIPTION OF HAZARDOUS WASTES (continued)

D. PROCESSES

A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (if a code is not entered in D(1))
D 0 0 1	500,000	G	S 0 1 S 0 2 T 0 4	
F 0 0 1	500,000	G	S 0 1 S 0 2 T 0 4	
F 0 0 2		G	S 0 1 S 0 2 T 0 4	Included with F001
F 0 0 3	2,716,000	G	S 0 1 S 0 2 T 0 4	
F 0 0 5		G	S 0 1 S 0 2 T 0 4	Included with F003
F 0 0 4	78,300	G	S 0 1 S 0 2 T 0 4	
U 0 0 2	200,000		S 0 1 S 0 2	Included with above
U 0 1 9				" "
U 0 3 1				" "
U 0 3 7				" "
U 0 5 2				" "
U 0 8 0				" "
U 1 1 2				" "
U 1 2 1				" "
U 1 4 0				" "
U 1 5 4				" "
U 1 5 9				" "
U 1 6 1				" "
U 2 1 3				" "
U 2 2 0				" "
U 2 2 6				" "
U 2 3 9				
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CONTINUE ON REVE

Hazardous Waste Characteristics

Overview

Hukill Chemical Corporation is a recycling facility for hazardous waste containing solvents and hydrocarbons. Hukill Chemical receives recyclable solvents in 55 gallon drums or in bulk, via tank trucks. Order sizes range typically from 500 to 30,000 gallons and are received from more than 350 customers on an annual basis. Our experience has indicated that materials from repeat customers never analyze identically from job to job.

Hazardous Wastes brought to Hukill Chemical for reclaiming will usually contain industrial solvents and undesirable material such as paint, pigments, ink pigments, greases, oils, resins, polymers, or color bodies, depending on the industry. In all cases, there is a short period of time where material is transported and stored prior to processing. Hazardous waste processing at Hukill Chemical Corporation is directed toward the resale of two basic products. One product is a distilled solvent sold for use as a solvent in cleaning, washing, formulating, etc. The other product is a supplement fuel sold under the trade name of Chem Fuel.

Equipment used in processing hazardous materials into distilled solvents include cone-bottom feed tanks, pumps, continuous and batch type evaporators and clean product storage tanks. Equipment used in processing fuels involve storage tanks, blending tanks, attritors/homogenizers, pumps and filters.

Two materials produced by hazardous waste processing that cannot be resold are distilled water containing less than 1% solvent and dirty solvents or distillation bottoms that can not be processed into a specification Chem Fuel product. The distilled water is shipped for treatment and disposal at an EPA approved water treatment facility. The dirty solvents or distillation bottoms are either solidified and sent to an EPA approved landfill or sent to an EPA approved destruction facility.

Classifications

Most of the spent solvents we recycle fall under the definition of hazardous wastes as determined by the generators, i.e., our customers. Because of this and the quantities of materials we deal with, Hukill Chemical Corporation is classified officially as a hazardous waste storage facility. The general types of hazardous wastes which Hukill Chemical Corporation handles are (using the EPA hazardous waste number) as follows:

- F001 The spent halogenated solvents used in degreasing and other application, tetrachlorethylene, trichlorethylene, methylene chloride, 1,1,1 trichloroethane, carbon tetrachloride, and the chlorinated flouorocarbons; and sludges from the recovery of these solvents.
- F002 The spent halogenated solvents, tetrachloroethylene, methylene chloride, trichlorethylene, 1,1,1, trichloroethane, chlorobenzene, 1,1,2 - trichloro - 1,2,2, trifluoromethane, orthodichlorobenzene and trichlorofluoromethane; and the still bottoms from the recovery of the solvents.

- F003 The spent non-halogenated solvents, xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, n-butyl alcohol, cyclohexanone, and the still bottoms from the recovery of these solvents.
- F004 The following spent non-halogenated solvents: cresols and cresylic acid, and nitrobenzene; and the still bottoms from the recovery of these solvents.
- F005 The spent non-halogenated solvents, methanol, toluene, methyl ethyl ketone, methyl isobutyl ketone, carbon disulfide, isobutanol, pyridine and the still bottoms from the recovery of these solvents.
- D001 General ignitable waste solvents, (flash point less than 140°F) which is not listed as a hazardous waste in sub-part D of CFR 40, Section 261.

Hukill Chemical Corporation also handles solvents which a customer must discard or have processed because it is off specification or has been blended accidentally with another solvent. Some of these solvents which have been processed are listed below with the corresponding hazardous waste numbers. *

U002 Acetone	U140 Isobutyl Alcohol
U112 Ethyl Acetate	U154 Methyl Alcohol
U080 Methylene Chloride	U159 Methyl Ethyl Ketone
U213 Tetrahydrofuran	U161 Methyl Isobutyl Ketone
U220 Toluene	U239 Xylene

As previously mentioned, incoming material will contain halogenated and non-halogenated solvents and nonvolatile solids consisting of pigments, resins, greases, oils, polymers or color bodies. These recyclable waste solvents can be identified as being generated by five main groups of solvent-using industries. In this document, typical chemical and physical analyses of recyclable waste solvents from each industry group are provided. This data provides the information required to properly treat, store and dispose of the recyclable waste solvent. This data comes from analyses performed by degreed chemists and engineers in Hukill Chemical Corporation's engineering and quality control laboratory and data from outside testing laboratories.

The reason for giving typical examples of the five types of industrial groupings is that Hukill Chemical Corporation processes 500 to 1,000 different orders per year from our 300-400 customers. Seldom have two orders ever analyzed to be identical in composition. However, the methods used to analyze the recyclable waste solvents are always the same.

Descriptions of the five industrial groups and accompanying data follow. Note that both unsaleable products generated by the reclamation, distilled water and incompatible dirty solvent wastes that are solidified, are both derived from the five industrial groupings. The hazardous waste classifications for these wastes will basically be the same as the material they were derived from, only the concentrations of solids, solvents, and water will change.

* A complete listing of potential hazardous wastes of this type can be found on page 4 of this document (Part A Application.)

Basis for Hazardous Designation

Current Federal interpretation of the definition of Hazardous Wastes found in Part 261 of the Hazardous Waste Regulations exclude from non-specific source lists those halogenated or non-halogenated waste solvents which have been blended prior to use in a process. For this reason it has been our practice to list more than one industry and EPA hazardous waste number when describing our wastes from customers on shipping manifests. For example:

1. Paint Manufacturing Industry - EPA Hazardous waste number(s)
F003, F005
Reason: a. Flash point \leq 140°F (Ignitable I)
b. Sub-part 261.31 list typical solvents in this industry as toxic (t) as well as ignitable (I).
2. Paint using industry - Group A EPA Hazardous waste number(s)
F003, F005
Reason: a. Flash point \leq 140°F Ignitable (I)
b. Sub-part 261.31 list typical solvents in this industry as toxic (T) as well as ignitable (I).
3. Paint using industry - Group B EPA Hazardous waste number(s)
F002
Reason: a. Flash point $>$ 140°F (not ignitable).
b. Sub-part 261.31 list typical solvents in this industry as toxic (T).
c. Not a metal cleaning operation.
4. Metal cleaning industry - EPA Hazardous waste number(s)
F001
Reason: a. Flash point $>$ 140°F (not ignitable).
b. Sub-part 216.31 list typical solvents in this industry as toxic (T).
c. Not a paint operation.
5. Chemical using/generating industry - 261.33 (f) 261.21 (b)
EPA Hazardous designation (for example given - Butyl Acetate and Toluene)
U220 Toluene (toxic) 261.33 (f)
D001 Not listed but ignitable 261.21 i.e. Butyl Acetate

b. Specific gravity

This analysis is used to verify that waste is as manifested when it is picked up from the generator and when it is received at the facility. It also provides a measure of weight/force for the designing and proper use of tanks and containers.

c. Flash point

Flash point is used to verify waste ignitibility (I) characteristics.

d. Acid Point Value (APV)

Analysis will identify corrosive potential of waste. Even slightly basic or acidic materials which may or may not be compatible with certain metals are noted and provisions made for safe transportation and handling.

e. Distillation range, yield, moisture content

These analyses are used to determine economic feasibility of recycling a dirty solvent.

f. Heat of Combustion

In order to certify that a material, either a dirty solvent or a distillation by-product, is a suitable fuel, the heat of combustion is determined.

g. Ph

A measure of acidity or basicity in an aqueous medium. The test is used to check distilled water wastes.

h. Compatibility

Whenever wastes are evaluated for reclaiming or for Chem Fuel, the waste is evaluated for its compatibility with process tanks, equipment, storage tanks and other wastes.

Wastes that are processed (reclaimed) are checked for compatibility with process tanks and equipment, storage tanks and equipment. Still bottoms generated from the reclaiming operation are checked for compatibility with a typical Chem Fuel product upon mixing.

Wastes that are processed into Chem Fuel are checked for compatibility with storage tanks, equipment and for compatibility with typical Chem Fuel product. (For more detail see Chem Fuel Section).

i. Chloride in Neutralized Combustion residues

The % Chloride in combustion residue samples is analyzed so that fuel products can be properly blended assuring that the 5% maximum chloride content in Chem Fuel products is not exceeded.

Test Methods

Test Methods to be used will be as described in Test Methods for Evaluating Solid Waste U.S. EPA/SW-846 Revision B.

a. Composition method

Composition is determined by using a dual column gas chromatograph with Hewlett-Packard Data Analyzer with integrator, Model - 5840A. A chromatographic column is selected that will separate components sufficiently to verify waste characteristics as described by the manifest.

b. Specific gravity

This test is made using a standard hydrometer and at room temperature.

c. Flash Point

A Setaflash closed cup tester is used to determine the flash point.

d. Acid Point Valve ASTM STD (D-1613-66)

Wastes that might not be compatible with storage or process equipment are screened out in checks made prior to processing. Materials found to be acidic will be transported and appropriately neutralized with a base. Typically by acidic we mean greater than .01% by weight acid but less than 1.0% by weight acid. Normal virgin solvents can contain from .005% to .01% by weight acid. (In our recent history, no solvent has been evaluated initially as being basic).

The test used to determine acidity or basicity of solvent is the APV test. An indication of basicity would be an instant end point on the APV test on introduction of the test sample into the titration mixture containing the indicator.

e. BTU content

One gram of material undergoes complete combustion in a Parr Bomb Calorimeter and BTU per gram exotherm is noted.

f. Viscosity

A Brookfield viscometer is used to measure viscosity of a sample in centipoise units.

g. Distillation range

A modified ASTM procedure is used to determine distillation range. We use a sample laboratory batch distillation.

h. % Chloride in combustion residues

Combustion residues are neutralized in the Parr Bomb during combustion. The neutralized residue is then analyzed via the ASTM 512-B method for determining chloride content in water.

i. Yield

Yield is calculated as a percentage of sample obtained distillate.

j. Moisture content

Moisture content is determined by gas chromatography and/or Karl Fisher.

k. Ph

Ph is determined using Ph paper or calibrated ph meter.

l. Compatibility

By examining component analyses, we can, with our knowledge of chemistry, avoid mixing or segregate materials that might not be compatible. Acidic materials are neutralized. Materials that when mixed may cause a precipitate due to incompatible solvent systems are kept segregated. (See Chem Fuel section C-3)

C-2C

Sampling Methods

A. Container sampling (drum)

1. Each container received at the facility is stenciled with the following code.
 - a. Hukill internal customer number.
 - b. Hazardous waste manifest number.
 - c. The number of drums in the shipment.
 - d. Optionally, an abbreviation of the major component.
 - e. Internal job/work order number (if for reclaiming).
2. The sampler then segregates the drums in to groups with similar contents.
3. A composite sample is made for each group by sampling a representative number of barrels in that group.
4. In lieu of a Coliwasa - samples of containerized wastes are sampled in a 4 Oz. bottle-narrow mouthed, (i.e., $\frac{1}{2}$ " dia), glass bottle attached to a rigid wire approximately 24" long. By feeding the bottle down through the drum such that air is displaced from the bottle at a steady rate, a representative sample of the waste material in the drum is obtained. We have found this method of sampling to be accurate and much more desirable from a spill, and housekeeping aspect than the cumbersome Coliwassa method. Occasionally when drums are known to contain significant "heels" of solid pigments, resins, dirt, etc. a drum pump will be used to extract material at the liquid/solid interface. This

3. Distillate product acid pt. value.
4. Solvent component analysis - G.C.
5. Heat of combustion and % Chloride in combustion residue - dist. bottoms.
6. Heat of combustion and % Chloride in combustion residue - distillate
(can be estimated from components)
7. Chem Fuel compatibility
8. Viscosity
9. Unusual odor.

Frequency - All nine parameters checked every time on every sample.

B. Mandatory tests for all Hazardous Waste Inbound material for Chem Fuel.

1. Heat of combustion and % Chloride in combustion residues - bulk stream.
2. Solvent component analysis - G.C.
3. Viscosity.
4. Visible solid particles.
5. Flash point.
6. Chem Fuel compatibility.
7. Odor.
8. Acid point value of solvent component.

Frequency - All eight parameters checked every time on every inbound shipment, see exhibits C-16 through C-19 for actual examples of this analysis. (Section C-3)

C. Mandatory Tests for Hazardous Wastes Inbound for Solvent Reclamation.

See exhibits C-2 through C-7 for examples.

1. First time customers - First and second shipments
 - a. Repeat section A analysis items completely.
2. Repeat reclaiming customers - Minimum check
 - a. Visual inspection.
 - b. Flash point.
3. Repeat reclaiming customer - every three months
 - a. Repeat procedure under Section A. analysis completely

HUKILL CHEMICAL CORPORATION

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Over Thirty-Five Years of Quality Products and Services

CHEM FUEL PRODUCT SPECIFICATIONS

<u>PARAMETER</u>	<u>LIMITS</u>
1. Physical State @ 60° F	Low viscosity blend of pumpable liquid hydrocarbon solvents with suspended solids.
2. Heat of Combustion	11,000 BTU/# Min.
3. Ash Content	10% by weight or less
4. Solids	MAXIMUM - 40%
5. Suspended Particle Size	20 Mesh (0.331 inches)
6. Viscosity	MAXIMUM - 300 cps@ 72° F- Comparable to #4 Fuel Oil
7. Moisture Content	NO FREE WATER - 5% contained water by weight
8. Heavy Metals	Less than 0.3% by weight Lead - 1300 ppm.
9. Chlorine Content	3% by weight desired 5% by weight maximum
10. Sulphur Content	2% by weight or less
11. Corrosion to Carbon Steel	None
12. Flash Point	Flammable 100°F
13. Weight per Gallon	7.5#/gallon to 9.0#/gallon
14. Compatibility	Sample Required

Materials whose properties vary from the suggested ranges may be acceptable.
All inquiries will be considered.

Unacceptable materials include inorganic acids or caustics or organic cyanides, lachramates or mercaptans. No PCB's, insecticides, pesticides, herbicides or other severely toxic, poisonous, explosive, corrosive, reactive or radioactive materials will be considered.

1. Alkyl Phenolic Tars
2. Paint Sludge
3. Resin Sludge
4. Contaminated soil from spills
5. Chlorinated still bottoms
6. Scrap and debris from plant clean-up.
7. Scrap rubber.

See exhibits C-8 through C-14.

C-2E

Inspections of Off-site Generated Wastes

Paragraph C of Section C-2D, Mandatory Tests for Hazardous Waste Inbound for Solvent Reclamation (page 30) describes the inspection of off-site generated wastes.

Bulk Sampling Special Note

Samples are obtained via bottles which are dipped into the top of each compartment via a wire or string. Bottoms of compartments are sampled by draining material out of the compartment's bottom valve and sampling again in a glass bottle.

It is felt that the concrete used for the base material in all three locations where containerized hazardous wastes are stored is a completely suitable material. Based on our policy of excluding very acidic and basic materials, plus our policy to neutralize, as soon as possible, wastes that arrive that are only slightly acidic or basic, we feel the chances of a spilled or leaked hazardous waste causing any significant damage to the concrete are extremely low.

Special Note on Deheading Containers

The deheading operator can be likened to a large "can opening" operation. A specific point to note is that the drum remains stationary at all times on a pallet while the "can opener" rotates around the drum. Because the drum is "bottom heavy", it is extremely stable. Drums are then emptied using mechanical or hydraulic "drum dumpers" and are scraped out with non-sparking shovels and scrapers. The deheading operation takes place near the east wall of the East Warehouse.

Solidification Process

As mentioned in Section C-1, two of the non-resaleable products produced are solvent based non pumpable wastes and distillation bottoms which are incompatible with Chem Fuel. Part of the specifications required by the disposal facility are that containerized wastes for disposal may not contain any free liquids or void space. (See page 30A, 30B in Section C-2).

In order to insure that the above specification is met, Hukill Chemical built and operates a small solidification unit. This unit is actually a converted concrete mixer located in the East Warehouse (See Plan Sheet 7). The unit was retrofitted with explosion proof motors and proper grounding. The unit has a batch capacity of about 150 gallons. Trained operators dump unreclaimable materials into the solidification mixer from 55 gallon open head drums. Absorbent is added to the mixture, such as ground clay or hydrated lime, until the contents reach a consistency thicker than honey with no visible free liquid. Solidified material is then dumped out of the mixer into appropriate new, reused or re-conditioned containers and labeled. Technicians from the laboratory then inspect the material in the containers by pushing steel or wooden rods down through the material in the drums. As the rods are pulled out, any evidence of free liquids is noted on the rods and in the depressions left by the rods. When no free liquid is observed, via this method, the drums are judged to have no free liquid. Landfill codes are assigned to the drums (Section C-2) and the drums are then sealed and put into the proper storage area.

Bottoms Sludge Tank

Design

(An engineering drawing of this tank is shown on Plan Sheet 13).

The base of the tank is 24" thick, reinforced concrete pad measuring 15 ft. x 15 ft. in the Tank Farm, (See Plan Sheet 11B). This tank was installed in 1979.

The maximum pressure exerted on the bottom of this tank will be:

$$28 \text{ ft. head} \times 1.2 \text{ (gravity)} \quad \text{Maximum spec.} \quad \frac{12 \text{ in.}}{\text{ft.}} \times \frac{1 \text{ lb/sq. in.}}{27.7 \text{ in H}_2\text{O}} = 14.6 \text{ PSIG.}$$

The tank is equipped with a float-type level indicator described previously. Overfilling is controlled manually as previously described. Material is withdrawn from this tank via a 6" Flange connection reduced to 2" carbon steel, threaded pipe.

This tank will be taken out of service when the shell thickness is .1875".

The bottoms from our two Luwa continuous thin film evaporators enter this tank via 2", Schedule 40, carbon steel lines running from the Process Building across the North Canopy Area to the tank.

The tank is operated at atmospheric pressure. Neither pressure or temperature gauges have been installed on this tank. We will contact the manufacturer to determine the exact temperature and pressure design limits for this tank.

Management

Only Chem Fuel compatible distillation bottoms are pumped into the Bottoms Tank. As the tank nears capacity, the contents are pumped either directly to a Process Feed Tank for Chem Fuel processing or to V-114, V-214, V-314 or V-414 for storage. From these tanks the waste is handled as described previously.

Inspections

Ultrasonic testing on the six hazardous waste storage tanks has been completed. Completed Shell Thickness Inspection forms for all six hazardous waste tanks are shown on pages 66J through 66AA. (Section F)

Tanks V-114, V-214, V-314, V-414, V-714 and the Bottoms Tank have never shown nor do show any signs of leakage or rupturing.

General corrosion will be evaluated on an inches per year corrosion rate basis. Of course, if a point on any tank exhibits the minimum shell thickness as set by the Regional Administrator, the tank will be decommissioned.

Once a corrosion rate per year standard is found, the timing for the next extensive set of evaluations can be safely determined. Of the auxiliary equipment used in support of tank management, evaluating the condition of hoses and hose fittings requires that closest attention because they are "temporary" connections. Again, see inspection Schedule for tanks.

Requirements for Ignitable or Reactive Wastes

All hazardous wastes stored in the tanks described in this section are ignitable. None of the wastes are reactive.

The Tank Farm is a restricted area. It is a Class I, Group D, Division I electrical area. No smoking or open flames are allowed in this area or in the North Canopy Area from which hoses and pumps are used to transfer wastes from these tanks. Welding or cutting is allowed under special conditions.

These tanks comply with the NFPA buffer zone requirement. All tanks are at least 180 ft. from the nearest property line on which a structure could be built. (See Plan Sheet 2.)

Areas of Non-Compliance

At this time, Hukill Chemical Corporation faces one area of non-compliance with respect to tanks. We are unable to provide detailed engineering prints of tanks V-114, V-214, V-314, V-414 and V-714.

We propose to eliminate this deficiency by immediately commissioning the completion of engineering drawings for all six hazardous waste tanks. A registered Professional Engineer will certify the design of the tanks for flammable liquid storage at atmospheric pressure. We propose to have this activity completed no later than November 1, 1984.

Shell Thickness Inspection

Tank V-114 Volume 14,000 Mat'l Const. C.S.

Installation Date 11/68

Original plat. thickness .375"

Decommission plate thickness .1875"

1st Testing (Attach outside test report)

Date June 14, 1984

Ave. Thickness .297"

Min. Thickness .26

Accum. Service Time 16 years

Corrosion

Orig. Thickness - Ave. thickness .078 "

Corrosion Rate

$$\frac{\text{Orig. Thickness} - \text{Ave. thickness}}{\text{Accum. Service Time}} = \frac{.078}{16} = .005 \text{ in/yr.}$$

Projected life left =
$$\frac{\text{ave. thickness} - \text{decomm. thick.}}{\text{corrosion rate in/yr.}} = \frac{.297 - .1875}{.005} = 22 \text{ yr.}$$

Next scheduled testing - June 1986

2nd Testing (Attach outside test report)

Date

Ave. Thickness

Min. Thickness

Accum. Service Time _____ years

Corrosion

Orig. Thickness - Ave. thickness _____ "

Corrosion Rate

$$\frac{\text{Orig. Thickness} - \text{Ave. thickness}}{\text{Accum. Service Time}} = \text{_____ in/yr.}$$

Projected life left =
$$\frac{\text{ave. thickness} - \text{decomm. thick.}}{\text{corrosion rate in/yr.}} = \text{_____ yr.}$$

3rd Testing (Attach outside test report)

Date

Ave. Thickness

Min. Thickness

Accum. Service Time _____ years

Corrosion

Orig. Thickness - Ave. thickness _____ "

Corrosion Rate

$$\frac{\text{Orig. Thickness} - \text{Ave. thickness}}{\text{Accum. Service Time}} = \text{_____ in/yr.}$$

Projected life left =
$$\frac{\text{ave. thickness} - \text{decomm. thick.}}{\text{corrosion rate in/yr.}} = \text{_____ yr.}$$

Shell Thickness Inspection

Tank V-214

Volume 14,000

Mat'l Const. C.S.

Installation Date 11/68

Original plat. thickness .375"

Decommission plate thickness .1875"

1st Testing (Attach outside test report)

Date June 14, 1984

Ave. Thickness .305"

Min. Thickness .275"

Accum. Service Time 16 years

Corrosion

Orig. Thickness - Ave. thickness .070 "

Corrosion Rate

Orig. Thickness - Ave. thickness = .0044 in/yr.

Accum. Service Time

Projected life left = $\frac{\text{ave. thickness} - \text{decomm. thick.}}{\text{corrosion rate in/yr.}}$ = 27 yr.

Next scheduled testing June, 1986

2nd Testing (Attach outside test report)

Date

Ave. Thickness

Min. Thickness

Accum. Service Time _____ years

Corrosion

Orig. Thickness - Ave. thickness _____ "

Corrosion Rate

Orig. Thickness - Ave. thickness = _____ in/yr.

Accum. Service Time

Projected life left = $\frac{\text{ave. thickness} - \text{decomm. thick.}}{\text{corrosion rate in/yr.}}$ = yr.

3rd Testing (Attach outside test report)

Date

Ave. Thickness

Min. Thickness

Accum. Service Time _____ years

Corrosion

Orig. Thickness - Ave. thickness _____ "

Corrosion Rate

Orig. Thickness - Ave. thickness = _____ in/yr.

Accum. Service Time

Projected life left = $\frac{\text{ave. thickness} - \text{decomm. thick.}}{\text{corrosion rate in/yr.}}$ = yr.

Shell Thickness Inspection

Tank V-314 Volume 14,000 Mat'l Const. C.S.

Installation Date 11/68

Original plat. thickness .375"

Decommission plate thickness .1875"

1st Testing (Attach outside test report)

Date June 14, 1984

Ave. Thickness .301"

Min. Thickness .265"

Accum. Service Time 16 years

Corrosion

Orig. Thickness - Ave. thickness .074 "

Corrosion Rate

$$\frac{\text{Orig. Thickness} - \text{Ave. thickness}}{\text{Accum. Service Time}} = \frac{.074}{16} = .0046 \text{ in/yr.}$$

Projected life left = $\frac{\text{ave. thickness} - \text{decomm. thick.}}{\text{corrosion rate in/yr.}}$ = 25 yr.

Next scheduled testing June, 1986

2nd Testing (Attach outside test report)

Date

Ave. Thickness

Min. Thickness

Accum. Service Time _____ years

Corrosion

Orig. Thickness - Ave. thickness _____ "

Corrosion Rate

$$\frac{\text{Orig. Thickness} - \text{Ave. thickness}}{\text{Accum. Service Time}} = \text{_____ in/yr.}$$

Projected life left = $\frac{\text{ave. thickness} - \text{decomm. thick.}}{\text{corrosion rate in/yr.}}$ = yr.

3rd Testing (Attach outside test report)

Date

Ave. Thickness

Min. Thickness

Accum. Service Time _____ years

Corrosion

Orig. Thickness - Ave. thickness _____ "

Corrosion Rate

$$\frac{\text{Orig. Thickness} - \text{Ave. thickness}}{\text{Accum. Service Time}} = \text{_____ in/yr.}$$

Projected life left = $\frac{\text{ave. thickness} - \text{decomm. thick.}}{\text{corrosion rate in/yr.}}$ = yr.

Shell Thickness Inspection

Tank V-414 Volume 14,000 Mat'l Const. C.S.

Installation Date 11/68

Original plat. thickness .375"

Decommission plate thickness .1875"

1st Testing (Attach outside test report)

Date June 14, 1984

Ave. Thickness .320"

Min. Thickness .270"

Accum. Service Time 16 years

Corrosion

Orig. Thickness - Ave. thickness .055 "

Corrosion Rate

$$\frac{\text{Orig. Thickness - Ave. thickness}}{\text{Accum. Service Time}} = \frac{.055}{16} = .0034 \text{ in/yr.}$$

Projected life left = $\frac{\text{ave. thickness - decomm. thick.}}{\text{corrosion rate in/yr.}}$ = 39 yr.

Next scheduled Testing June, 1986

2nd Testing (Attach outside test report)

Date

Ave. Thickness

Min. Thickness

Accum. Service Time _____ years

Corrosion

Orig. Thickness - Ave. thickness _____ "

Corrosion Rate

$$\frac{\text{Orig. Thickness - Ave. thickness}}{\text{Accum. Service Time}} = \text{_____ in/yr.}$$

Projected life left = $\frac{\text{ave. thickness - decomm. thick.}}{\text{corrosion rate in/yr.}}$ = yr.

3rd Testing (Attach outside test report)

Date

Ave. Thickness

Min. Thickness

Accum. Service Time _____ years

Corrosion

Orig. Thickness - Ave. thickness _____ "

Corrosion Rate

$$\frac{\text{Orig. Thickness - Ave. thickness}}{\text{Accum. Service Time}} = \text{_____ in/yr.}$$

Projected life left = $\frac{\text{ave. thickness - decomm. thick.}}{\text{corrosion rate in/yr.}}$ = yr.

Shell Thickness Inspection

Tank Bottoms Sludge Volume 16,000 Mat'l Const. C.S.

Installation Date 1979

Original plat thickness .26"

Decommission plate thickness .1875"

1st Testing (Attach outside test report)

Date June 14, 1984

Ave. Thickness .26"

Min. Thickness .255"

Accum. Service Time 5 years

Corrosion
Orig. Thickness - Ave. thickness .005 "

Corrosion Rate

$$\frac{\text{Orig. Thickness} - \text{Ave. thickness}}{\text{Accum. Service Time}} = \underline{.001} \text{ in/yr.}$$

Projected life left =
$$\frac{\text{ave. thickness} - \text{decomm. thick.}}{\text{corrosion rate in/yr.}} = \underline{72.5 \text{ yr.}}$$

Next scheduled testing June, 1988

2nd Testing (Attach outside test report)

Date

Ave. Thickness

Min. Thickness

Accum. Service Time _____ years

Corrosion
Orig. Thickness - Ave. thickness _____ "

Corrosion Rate

$$\frac{\text{Orig. Thickness} - \text{Ave. thickness}}{\text{Accum. Service Time}} = \underline{\hspace{2cm}} \text{ in/yr.}$$

Projected life left =
$$\frac{\text{ave. thickness} - \text{decomm. thick.}}{\text{corrosion rate in/yr.}} = \underline{\hspace{2cm}} \text{ yr.}$$

3rd Testing (Attach outside test report)

Date

Ave. Thickness

Min. Thickness

Accum. Service Time _____ years

Corrosion
Orig. Thickness - Ave. thickness _____ "

Corrosion Rate

$$\frac{\text{Orig. Thickness} - \text{Ave. thickness}}{\text{Accum. Service Time}} = \underline{\hspace{2cm}} \text{ in/yr.}$$

Projected life left =
$$\frac{\text{ave. thickness} - \text{decomm. thick.}}{\text{corrosion rate in/yr.}} = \underline{\hspace{2cm}} \text{ yr.}$$

HERRON TESTING LABORATORIES, INC.

5405 SCHAAF ROAD • CLEVELAND, OHIO 44131 • 216/524-1450
CONSULTATION AND TESTING SINCE 1911

NON-DESTRUCTIVE INSPECTION

DATE 6-20-84

Page 1 Of 6

Herron
File No. S-4604

Hukill Chemical

Your
P. O. No.

Date of 6-13-84
Inspection 6-14-84

Your
Shipper No.

7013 Krick Rd.

Contract No.:

Bedford, Ohio 44146

Level:

Class:

Grade:

d:

ure:

HTL-1014 Rev. 0

o.:

ntity:

5

Total Accepted:

Total Rejected:

Material:

☐ Magnetic Particle

☐ Penetrant

☒ Ultrasonic

☒ Thickness

☐ Pressure Test

RESULTS

UANTITY

PART NUMBER

DESCRIPTION

Hazardous Waste Storage Tanks

V-114
V-214
V-314
V-414

Cone Sludge Tank

See Attached Data Sheets for
Exact Readings.

COMMENTS

Equipment: Krautkramer DM-1 (digital thickness meter), Aerotech DMS
Transducer.

Couplant: Exosen #14

Note: Inspection on 6-13-84 conducted by James Feuerstein.
Inspection on 6-14-84 conducted by Dwight Graff.

All Readings Taken Thru Paint on Outside Surface of Tanks.

The foregoing is expressly limited to findings based upon material,
information, and/or specifications furnished by client and excludes
any express or implied warranties as to the fitness of the material
and/or process so subjected to examination and/or analysis for any
other purpose or use.

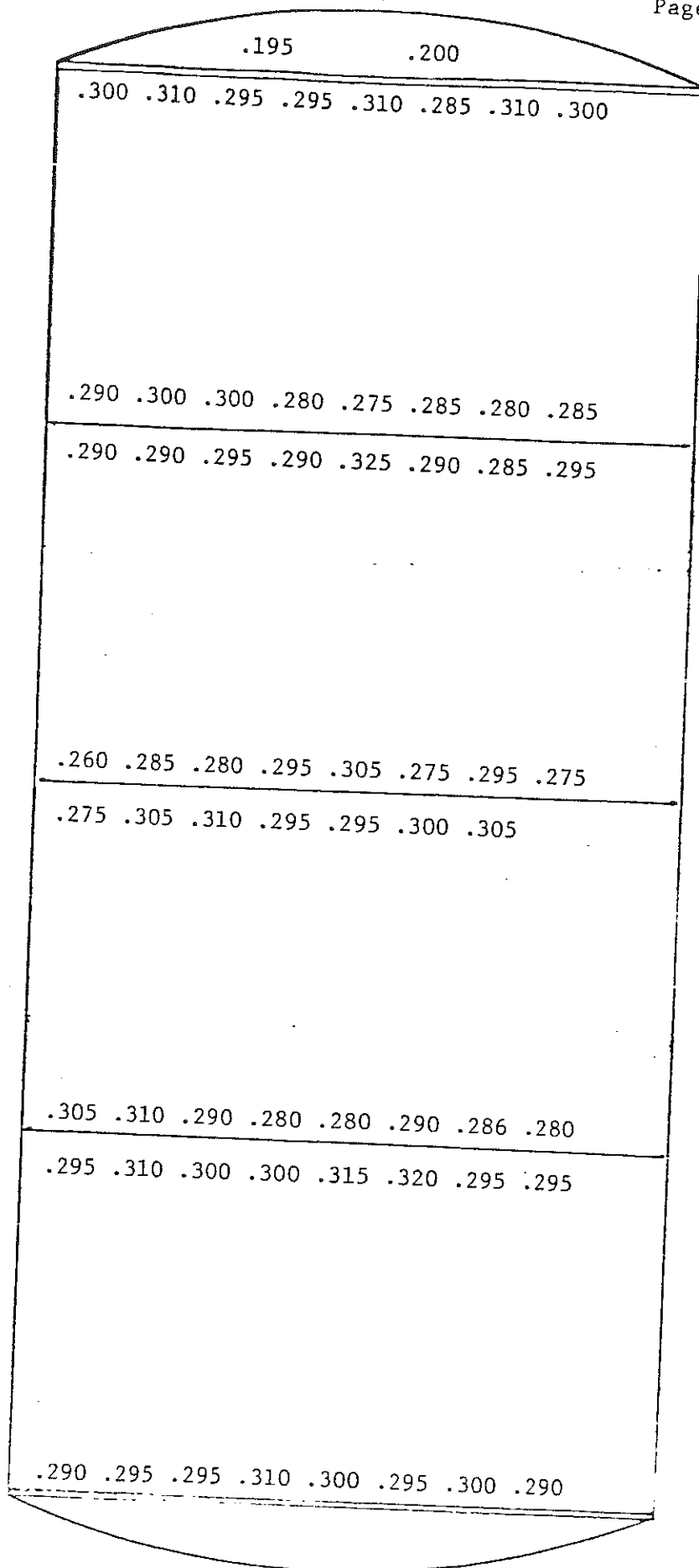
HERRON TESTING LABORATORIES, INC.

By James Feuerstein

Qualification SNT-TC-1A

Level II

053-17



1-21

		.215				.215	
.275	.295	.285	.295	.285	.245	.295	.285
.285	.285	.280	.285	.300	.290	.285	.280
.315	.315	.285	.295	.300	.280	.305	.280
.275	.280	.310	.290	.295	.295	.295	.290
.305	.310	.325	.290	.285	.300	.310	.305
.310	.340	.320	.315	.290	.310	.320	.295
.320	.315	.330	.325	.315	.315	.310	.300
.300	.315	.315	.285	.295	.300	.315	.315

055-19

.200				.200			
.285	.285	.290	.285	.300	.300	.295	.300
.280	.315	.285	.280	.325	.315	.300	.300
.280	.310	.275	.265	.290	.295	.275	.265
.265	.270	.265	.265	.270	.275	.270	.275
.305	.305	.300	.285	.285	.285	.305	.290
.305	.310	.295	.315	.310	.315	.300	.315
.295	.280	.290	.305	.300	.305	.305	.320
.290	.290	.290	.305	.315	.290	.310	.315

.240				.240			
.290	.285	.285	.280	.280	.300	.290	.285
.280	.300	.285	.280	.270	.290	.285	.295
.275	.275	.310	.300	.355	.300	.295	.300
.295	.280	.285	.295	.285	.270	.295	.325
.315	.315	.290	.300	.305	.310	.335	.325
.310	.315	.360	.365	.345	.325	.330	.305
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.305	.280	.300	.325	.360	.335	.300	.345

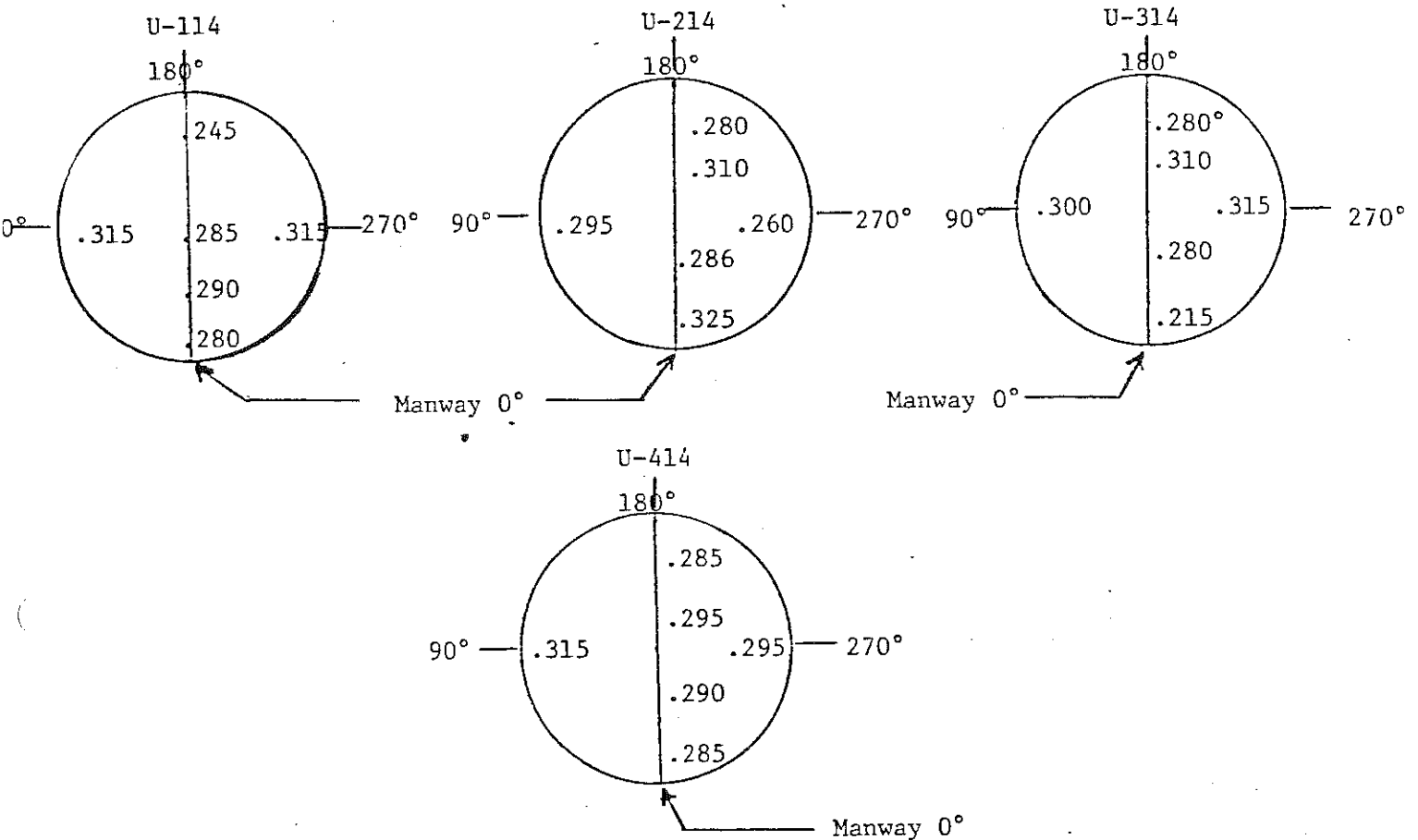
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Hukill Chemical
Herron File No. S-4604
6-13, 6-14, 1984
Page 6

Readings Off Bottoms of Each Tank



All Readings Done Thru Paint On The Outside of Tanks.
Tanks U-114, U-214, U-314, U-414 and Cone Sludge Tank.

Readings For Cone Sludge Tank

.255
.285
.255
.270
.255

253-19

Shell Thickness Inspection

Tank V-714 Volume 14,000 Mat'l Const. C.S.

Installation Date 11/68

Original plat thickness .375

Decommission plate thickness .1875

1st Testing (Attach outside test report)

Date August 03, 1984

Ave. Thickness .261"

Min. Thickness .208"

Accum. Service Time 15 years

Corrosion

Orig. Thickness - Ave. thickness .114 "

Corrosion Rate

$$\frac{\text{Orig. Thickness - Ave. thickness}}{\text{Accum. Service Time}} = \underline{.0071} \text{ in/yr.}$$

Projected life left =
$$\frac{\text{ave. thickness - decomm. thick.}}{\text{corrosion rate in/yr.}} = \underline{10.3 \text{ yr.}}$$

Next scheduled testing August, 1986

2nd Testing (Attach outside test report)

Date

Ave. Thickness

Min. Thickness

Accum. Service Time _____ years

Corrosion

Orig. Thickness - Ave. thickness _____ "

Corrosion Rate

$$\frac{\text{Orig. Thickness - Ave. thickness}}{\text{Accum. Service Time}} = \underline{\hspace{2cm}} \text{ in/yr.}$$

Projected life left =
$$\frac{\text{ave. thickness - decomm. thick.}}{\text{corrosion rate in/yr.}} = \underline{\hspace{2cm}} \text{ yr.}$$

3rd Testing (Attach outside test report)

Date

Ave. Thickness

Min. Thickness

Accum. Service Time _____ years

Corrosion

Orig. Thickness - Ave. thickness _____ "

Corrosion Rate

$$\frac{\text{Orig. Thickness - Ave. thickness}}{\text{Accum. Service Time}} = \underline{\hspace{2cm}} \text{ in/yr.}$$

Projected life left =
$$\frac{\text{ave. thickness - decomm. thick.}}{\text{corrosion rate in/yr.}} = \underline{\hspace{2cm}} \text{ yr.}$$

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CONSULTATION AND TESTING SINCE 1911

NON-DESTRUCTIVE INSPECTION

DATE 8-3-84

Page 1 Of 6

Herron
File No. S-4785

Your
P. O. No.

Date of
Inspection 8-3-84

Your
Shipper No.

Contract No.:

Level:

Class:

Grade:

☐ Magnetic Particle

☐ Penetrant

☐ Ultrasonic

☒ Thickness

☐ Pressure Test

☐

HTL 1014 Rev. 0

Material:

Quantity: 1 Total Accepted: Total Rejected:

QUANTITY	PART NUMBER	DESCRIPTION	RESULTS
1	V714	V714 Water Tank	See Attached Data Sheets

COMMENTS

Thickness Survey Equipment Used: Krautkramer DM-2

The foregoing is expressly limited to findings based upon material, information, and/or specifications furnished by client and excludes any express or implied warranties as to the fitness of the material and/or process so subjected to examination and/or analysis for any particular purpose or use.

Form NDT 300

HERRON TESTING LABORATORIES, INC.

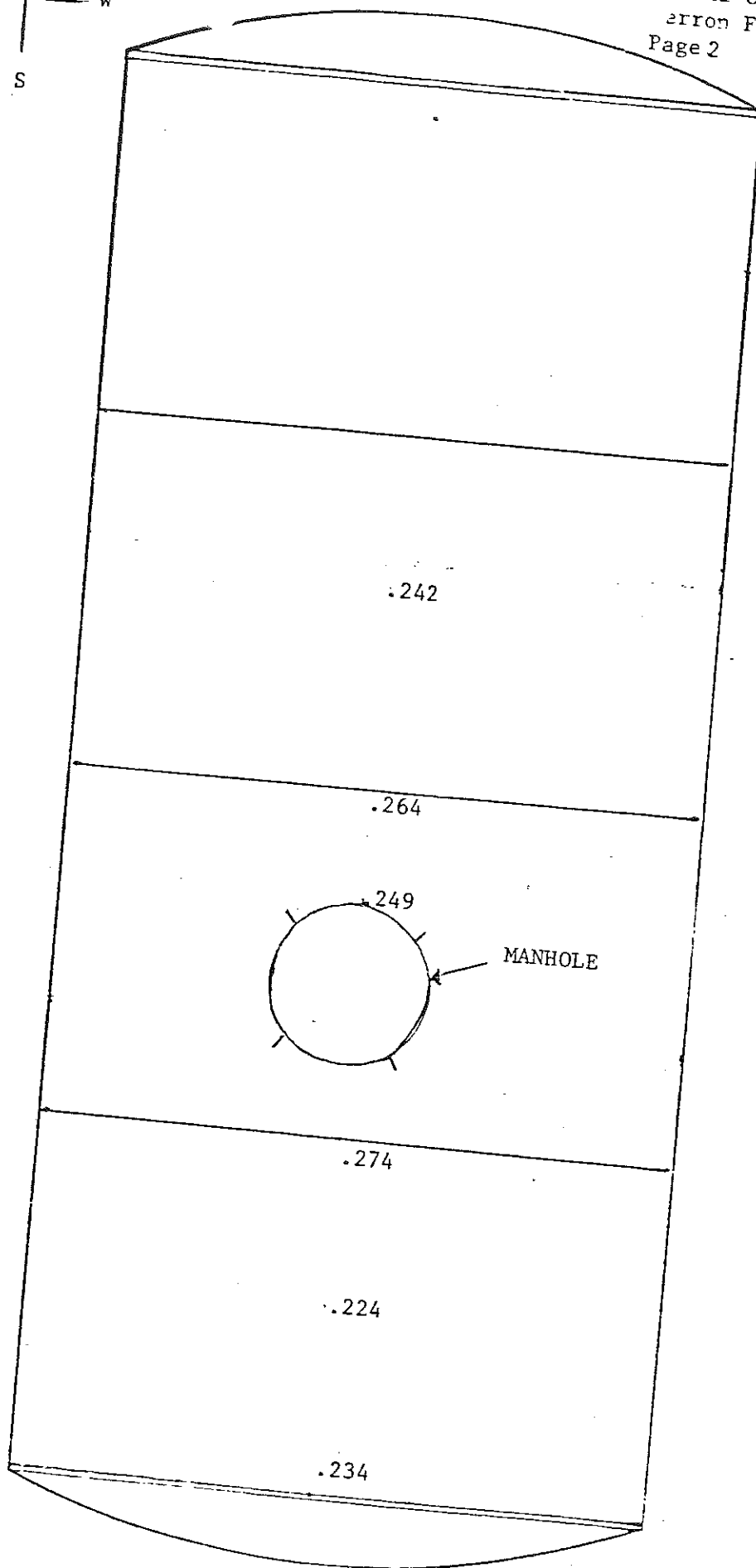
By Howard Carter

Qualification _____ Level _____

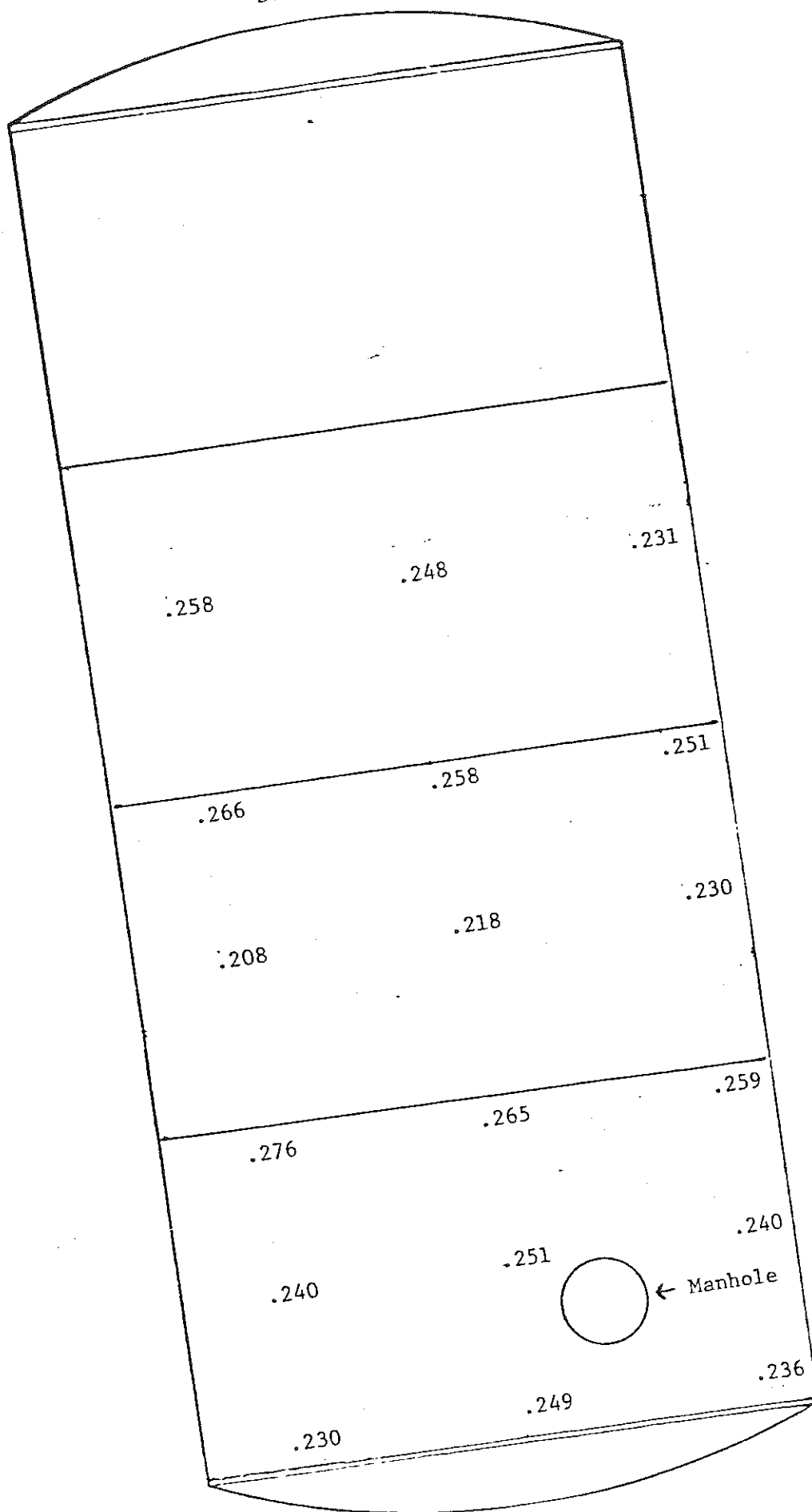
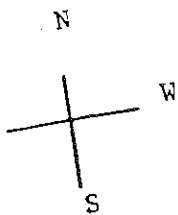
E ——— W
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NORTH

Hukill Chemical
error File No. S-4785
Page 2

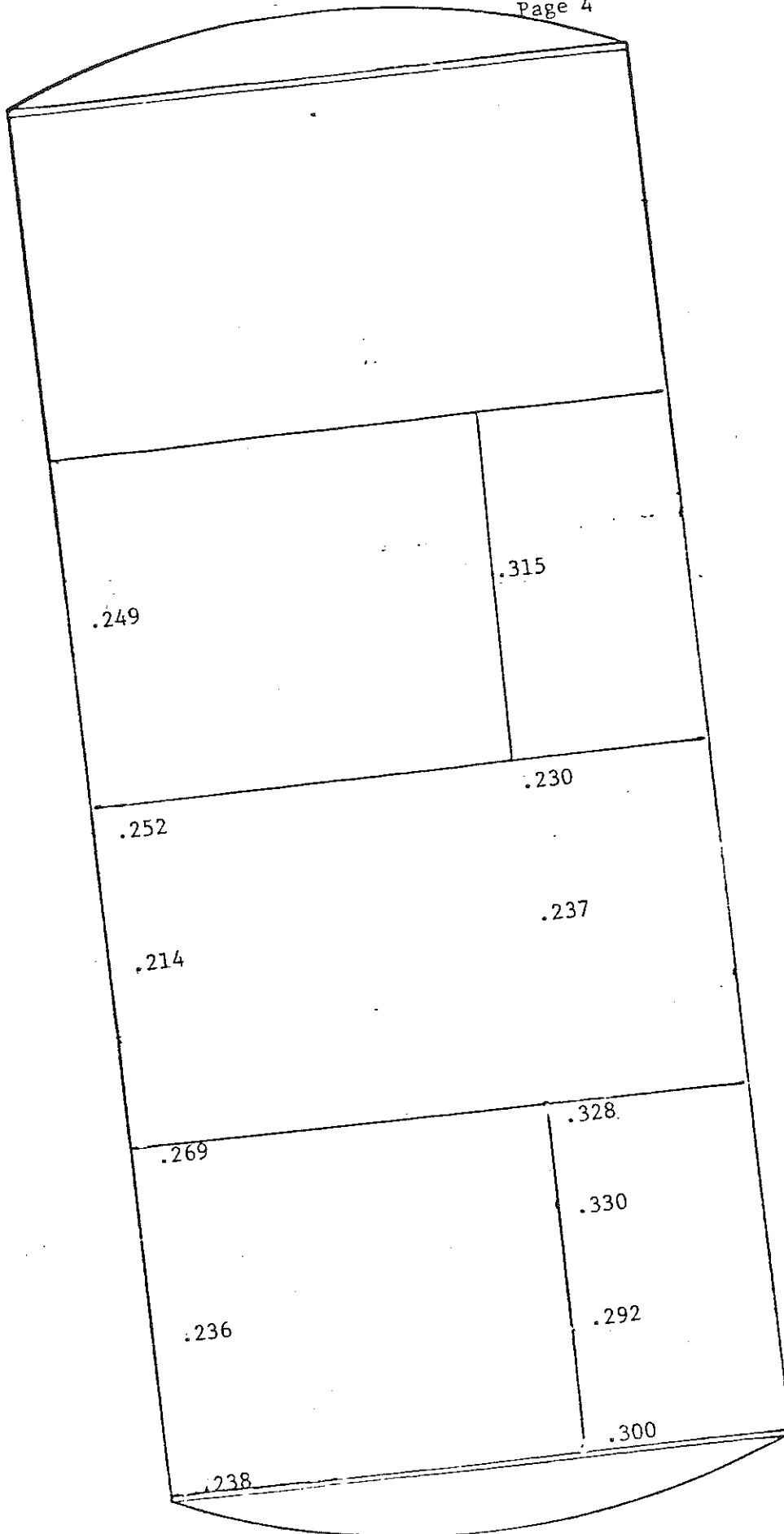


SOUTH

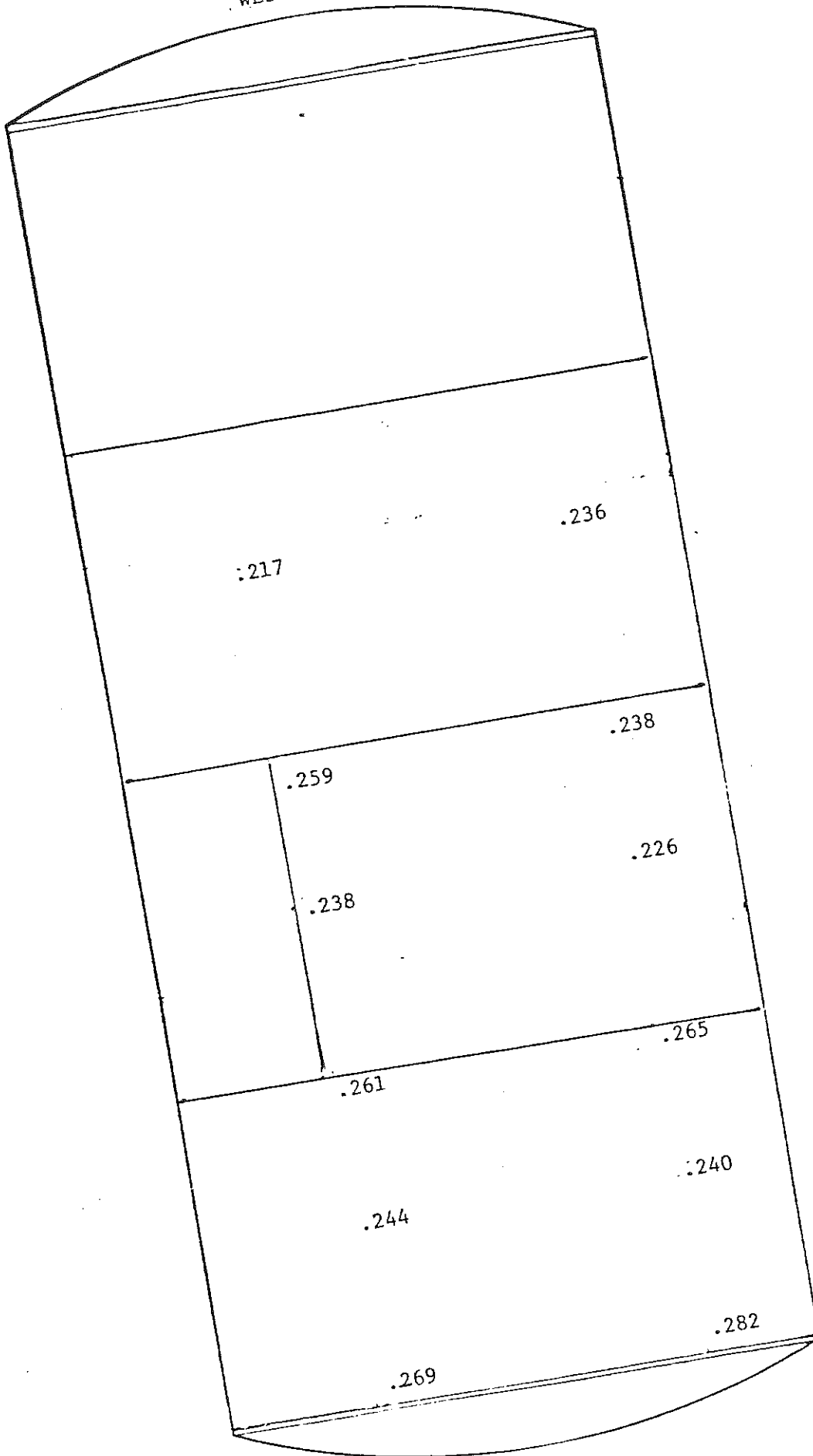


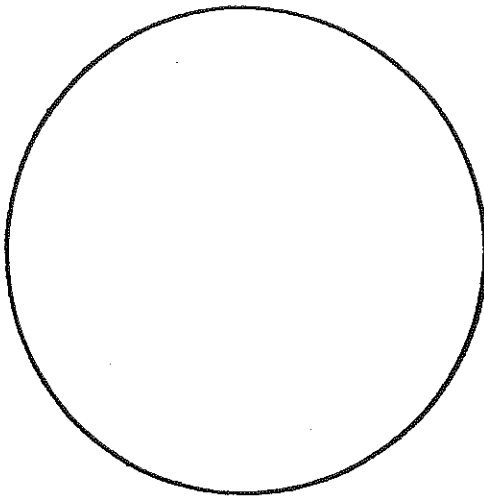
EAST

S W

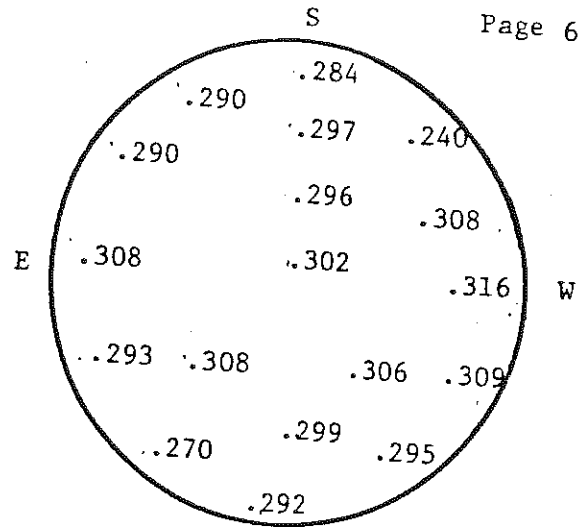


WEST





TOP HEAD
(no Readings Taken)



N
BOTTOM HEAD

V714 WATER TANK

G-2 EMERGENCY COORDINATORS

1. Robert Hukill - V.P. General Manager Primary Coordinator

Personally Identifiable

Personally Identifiable

Work Phone: 216-232-9400

Home Phone: Personally Identifiable Info

2. David Marlin - Process Engineer

Personally Identifiable Info

Personally

Work Phone: 216-232-9400

Home Phone: Personally

3. Robert Lang - Production Supervisor

Personally

Personally Identifiable Info

Work Phone: 216-232-9400

Home Phone: Personally

The above listed emergency coordinators are hereby authorized to commit necessary resources to respond to rectify any emergency situation requiring the implementation of this contingency plan.

Emory G. Hukill - President

Signature

Emory G. Hukill Date *June 7, 1984*

G-4I Container Spills and Leakage

0 Procedures for responding to container spills or leakage.

-- Expeditious removal of spilled waste.

Whenever waste leakage or spillage is detected, the material will be contained by absorbent. The contaminated material will be put into a drum for solid waste until disposal.

-- Repair or replacement of containers.

The contents of any leaking or damaged containers in the container storage facility will be removed to a secure drum and the defective container will be replaced.

G-4J Tank Spills and Leakage

0 Procedures for responding to tank spills or leakage.

-- Expeditious removal of spilled waste.

In the event of spillage or leakage from a tank, all remaining material in the tank will be transferred to an empty tank or tanker. Any large spill of material will be contained within a dyked area; or any small spill will be contained by absorbent. Material in the dyked area will be pumped into the same tanks as used above or another tank or tanker. Material contained with absorbent will be cleaned up and put into a drum for solid waste disposal. Hukill Chemical Corporation has designated V-114 as a hazardous waste spill control tank. It will also be left empty for the purpose of transferring material from a spill or leaking container.

-- Repair of tank

Upon removal of material from the tank, the tank will be repaired using standard tank repair techniques. After completion of the tank repair, the tank may be tested hydrostatically and/or with air pressure. A more frequent inspection of the tank will be conducted to evaluate the tank repair procedure over time.

G-5 Emergency Equipment

The equipment described below represents the minimum emergency response equipment available to respond to either fire or spill emergencies at Hukill Chemical Corporation.

General.

1. Fire Alarm

There are two methods for sending out a fire alarm.

- a. The paging system which is used to page throughout the plant. The page boxes are located in the front office.
- b. The Time Buzzer can be manually activated by a button located outside the lunch room. This buzzer is audible throughout the Plant.

We are planning to upgrade our alarm system by installing eleven bells and eleven hand pulls throughout the two plant buildings. This system would also be connected to our electronic security system which would notify the fire department.

2. Automatic Sprinkler System

The automatic sprinkler system is fed by an on-site 250,000 gallon water tank. The system is a grid of sprinkler heads throughout both East and West buildings. The system is a wet pressure system on the west building, and a dry air pressure

system in the east building. If the sprinkler head is activated by the heat of a fire, the resulting pressure drop activates the pump and the alarm.

3. Fire Hydrant

A fire hydrant is located on the facility. Fire hoses are available and foam liquid concentrate is provided with the proper nozzle for foaming.

4. Portable fire extinguishers.

Portable fire extinguishers have been located throughout the facility. These fire extinguishers are rated for A, B, and C fires. Protective fire equipment is located in the Emergency Supply Cabinets located in the East and West Warehouses. The equipment in those cabinets is listed in #6 below.

5. Spill response.

A collection of spill response equipment and protective equipment is located in the East Warehouse. This equipment includes:

- a. Absorbent media such as Floor dry for spill control and clean-up.
- b. Non-sparking shovels.
- c. Brooms.
- d. Solvent for decontamination.
- e. Bung wrench.
- f. Electric Barrel cutter. (Remove drum top to transfer contents).
- g. Pumps. Hand pumps.
- h. Tank repair equipment.

6. Safety equipment.

- a. Hardhats with splash shields.
- b. Protective clothing (rubber overalls, gloves, boots).
- c. Organic vapor respirators.
- d. Self contained breathing apparatus.
- e. Emergency eye wash.
- f. First aid kits.

SAFETY AND EMERGENCY EQUIPMENT

- A. Fire alarm
- B. Fire blanket
- C. Self contained breathing equipment
- D. Fire hydrant
- E. Main electrical switch
- F. First aid station
- G. Emergency Supply Cabinets
- H. Hose connected to sprinkler system
- J. Fire wall
- K. A.P.I. separator and spill basin
- M. Fire skid with foam for tank fires
- N. Skids with spill treatment absorbant and assessories
- O. Oxygen (dial 201)
- P. Telephone and intercom
- R. Organic vapor respirator
- S. Stretcher
- T. 250,000 gal. H₂O tank, heated, for sprinklers
- V. Vent switch
- W. Emergency eye wash
- X. Portable fire extinguishers
- Z. Cutting torch

KEY FOR FIGURE G 2

H1b TRAINING CONTENT, FREQUENCY AND TECHNIQUES

A. Instruction

- I. Initial Training is given to all employees consisting of:
 - a. A slide presentation of the daily routine functioning of Hukill Chemical. The areas that would have any hazardous waste or emergency potential are highlighted and explain for preventative and reactive procedures.
 - b. The National Safety Council's series "Working With Chemicals and Your Health" is used for assuring a basic familiarity with the precautions for working with chemicals. This series covers general concepts, solvents, acids and bases, and toxic metals in a pre-test, note taking and post-test format.
 - c. The evacuation is personalized for the area in which each new employee will be working.
 - d. A plant tour is given by the training director to familiarize the new employee with the areas viewed in the slide presentation. Particular attention is given to answering questions of the new employee and explaining precautionary procedures.
 - e. The employee is introduced and indoctrinated in the contingency plan presented in this document (section G).
 - f. A new employee must complete all phases of training described in 264.16b in the first 6 months of employment and before working with Hazardous Wastes while unsupervised.

II. Management Personnel (figures H-8, 13) are given both initial and semi annual training:

- a. Initial training for management is designed to formalize the procedures at Hukill Chemical for supervising employees who might handle hazardous waste, and the documenting of handling hazardous waste. These management employees would be stepped through:
 1. The operating record plan
 2. SPCC Plans
 3. Emergency Procedures
 4. Safety plan
 5. Fire brigade plans
- b. The semi-annual review and update will be conducted by an outside consultant hired by Hukill Chemical to present the most relevant program for that particular time.

III. Operations personnel will be given both initial training and periodic review training at the least semi-annually.

- a. Initial training for "hands on" operations employees and the training director and will specifically reflect the job duties of that employee (figure H-22)
- b. In addition, employees will be trained in the Contingency Plan and in the handling of emergency spill clean up.
- c. Semi annually the operations employees will be given a refresher and update seminar. This will either be part of the management seminar or instructed by management within a week of that seminar.
- d. To insure a constant awareness for and to keep current in all aspects there will be a monthly safety and emergency meeting. At this session all areas of Hukill Chemical safety will be addressed. A recent example at (figure H-23 A-D)

B. Record Keeping

- I. For each employee at Hukill Chemical a folder will be placed in a training file. This folder will contain:
 - a. A position description enumerating the title, requirements for employment, areas of responsibility and the limits of authority.
 - b. A training record Summary Sheet which describes employees interface with the handling of Hazardous Waste and the training sessions the employee has attended.
 - c. Copies of certificates of training.
 - d. Any other documents that Hukill Chemical will deem relevant to an employee and their training.
- II. Records of each employee will be kept for at least three years after separation. Records will be updated semi-annually, or when training occurs. If closure were necessary all records would be updated immediately prior to that closure.

H1c TRAINING DIRECTOR

Mr. Robert Lang has been appointed training director for Hukill Chemical. In addition to overseeing the general training program and the initial training for each employee; the training director will chair the committee to select the content and presentation of the semi-annual review and update sessions. Mr. Lang's resume is (figure H-24). Mr. Kevin Lehner provided the initial training for Hukill Chemical current employees. Mr. Lehner's resume is (figure H-25 A&B).

- H1d Each person is given hazardous waste training that will be related to his function. Management personnel are concerned with operation of the facility, control of employees, and reporting of hazardous waste activity. "Hands On" personnel are concerned with the processing of products. The management training is enumerated in section H-1b and the training cross reference for the "Hands On" employees is found in (figure H-22).

H1f TRAINING FOR EMERGENCY RESPONSE

- A. Contingency Plan - Each new employee is instructed in the processes of the Hukill Chemical Corporation Contingency Plan.
- B. Evacuation Plan - Every new Hukill employee is given specific instruction in evacuation procedures for their working area.
- C. Monthly Safety and Emergency Meeting - Once a month an update on retraining sessions is held in a specific emergency of safety procedure.

H1g IMPLEMENTATION OF TRAINING PROGRAM

- A. Kevin Lehner was brought in by Hukill Chemical to give initial training to all current employees. The schedule of that training is (figure H-26).



Re: Hukill Chemical
OHD001926748/02-18-0315
Cuyahoga County

July 16, 1984

Mr. Robert Hukill
Hukill Chemical Corporation
7013 Krick Road
Bedford, OH 44146

Dear Mr. Hukill:

The attachment to this letter lists Ohio EPA's comments about Hukill Chemical's response dated May 31, 1984 to my letter dated May 15, 1984. Some of our original comments have still not been fully addressed. We understand that the missing information on the tanks will be provided by September 1, 1984. We expect a complete response to all of the attached comments by this date.

Ohio EPA is anxious to expeditiously process this permit application. Your cooperation is appreciated. Please contact me (614/466-8934) or Milton Rinehart (614/462-6303) if you need assistance.

Sincerely,

Dan T. Redman, P.E., Manager
Engineering Section
Div. of Solid and Hazardous Waste Management

DR/kjl

cc: Kris Coder, NEDO
Milton Rinehart, ES, DSHWM
Jim Brossman, Region V
File #02-18-0315

0827T

RECEIVED
JUL 20 1984
WMD-RAIU
EPA, REGION V

RECEIVED
JUL 19 1984
WASTE MANAGEMENT
BRANCH

Hukill Chemical Co.
Comments on Adequacy Response
dated May 31, 1984

Section A

1. Adequacy comment 1.c. was not addressed in response.

Section C

1. pg. 16 - In description of the F002 wastes there are some typographical errors.
2. pg. 17 - The Part A permit specifies that F004 wastes are handled at this facility. Please add the F004 waste to your discussion.
3. pg. 17 - The section referenced in D001 should be Section 261, not 251.
4. pg. 17 - The off-spec solvents (U-Group) are not listed in the Part A permit. Please submit a modified Part A.
5. pg. 23 - Please add the less than or greater than signs to the flashpoint limit of 140°F.
6. pg. 29 - Describe in more detail by what methods bulk sampling is done. Is the coliwasa used in this procedure?

Section D - Containers

1. Adequacy comments 5 and 9 were not addressed in response.

Tanks

1. Adequacy comments 1, 2, 3 and 4 were not addressed in response.

Section F

1. pg. 52 - Are visitor passes still being made available for all visitors entering the facility?

Section G

1. pg. 77 - You must give us assurances that there will always be a tank or vessel available to expedite the transfer or clean up of large tank spills or leakages.
2. pg. 78 - Give more detail to the location of the fire alarm. Is there more than one? If there is only one alarm, is it accessible to all employees? Provide all telephone locations on pg. 79A if they are part of the emergency intercom system. Where are the automatic sprinkler systems located? How are they activated? Where is the location of the fire brigade equipment system? Include a list of the protective fire equipment. Multiple fire hydrants are indicated. Only one is found on 79A. Please explain.

3. pg. 84 - Please clarify whether "general training" is the same as initial training. There is no indication that operational employees receive training in the Contingency Plan or emergency spill clean up procedures.
4. pg. 85 - Statements (b) and (c) under B - Recordkeeping are not clear. Please reword them.
5. pg. 85 - Please address the fact that training of new employees is indicated within the first six months of their employment.

General

1. Describe the decision making process in Waste Analysis Plan. Who are the decision makers? Who is responsible for determining manifest discrepancies? When, if ever, will a load be rejected and what are the criteria for rejecting a load?
2. State specifically which still bottoms are incorporated into the Chem Fuel.

0827T

HUKILL CHEMICAL CORPORATION

7013 KRICK ROAD • BEDFORD, OHIO 44146 • 216/232-9400

Over Thirty-Five Years of Quality Products and Services

RECEIVED
JUN 12 1984

WASTE MANAGEMENT
BRANCH

May 31, 1984

RECEIVED
JUN 13 1984

WMD-RAIU
EPA, REGION V

Mr. Milton Rinehart
Ohio E.P.A., E.S. OSHWM
361 East Broad Street
Columbus, Ohio 43216-1049

Dear Mr. Rinehart:

Attached are two enclosures; one copy of pages to our Part B Application, and one copy of commentary on questions in the adequacy comments that weren't explained by the changes in the permit.

I look forward to hearing from you with comments on our work. We will continue to proceed with our plans to meet the deadlines in the permit.

Very truly yours,

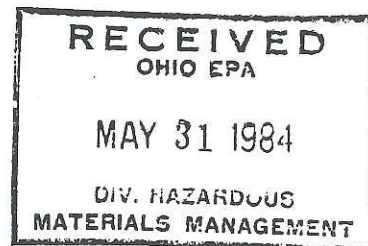
HUKILL CHEMICAL CORPORATION

Robert L. Hukill

Robert L. Hukill
Vice President
General Manager

RLH/sj

Enclosures



COPY

053-16

Part B - Response to
Adequacy Comments to Facility

Part A

Section A-1

- a.) Our NPDES expired in 1981. Prior to that, we made application to renew our permit on Application #OH0063444. In June of 1983, our NPDES permit number was changed from F-336 AD to 31F00036. The correct NPDES permit number is 31F00036. (See attached copies of notification.)
- b.) S01 should be 55,000 gallons which equates to 1,000 drums. S02 is correct at 86,000 gallons. This equates to five 14,000 gallon tanks and one 16,000 gallon tank. The previous figure of 150,000 gallons was a figure that included any tank that came in contact with dirty solvent. Since that first submission, we have become more familiar with the regulations on that point and do not include the cone-bottom feed tanks or the Chem Fuel product tanks.
- c.) In the summer of 1982, we installed another Luwa Thin Film Evaporator which gave us increased distillation capacity. The increased gallonage represents the increased volume of business that we felt we would be acquiring.

Section A-2

You are correct; we wish to be permitted for 1,000 drums on site. A corrected page 3, with a revision date on it, has been included.

Section B

- 1.) Well Logs are provided in Exhibits B-1 thru B-4 (Pages 13A thru 13D).
- 2.) The major traffic flow to and from the plant travels on Krick Road to Northfield Road, north to Forbes Road, east to I-271. From this point, it is easy to go anywhere north or south and to connecting points east and west. There are three traffic patterns inside the facility; one for vehicular traffic, one for lift fork traffic, and one for truck traffic. See Exhibits B-5 thru B-7 (Pages 13E thru 13G).

Section C

- 1.) See C-2, Page 24
- 2.) See C-1, Page 16
- 3.) See C-2, Page 24
- 4.) See C-3, Page 30Y

Section D

- 1.) See D-1 and D-2, Pages 32 and 38

Tanks

- 1.) See D-2, Page 38

Diagrams

- 1.) Revised Plan Sheet 8, Page 37C
- 2.) See Plan Sheets 9 and 10, Pages 37E and 37F. Yes, these are the same tank.

- 3.) See Plan Sheet 11B, Page 44
- 4.) See Plan Sheet 7, Page 15A and Plant Sheet 2, Page 14A. We have deleted Plan Sheet 13.
- 5.) We are no longer using these areas for storage. All hazardous waste storage of containers with free liquid is inside the warehouse, called Storage Area B.

Section F

- 1.) See Pages 54A and 54B
- 2.) See Pages 54A and 54B
- 3.) See Pages 55A and 56
- 4.) See Pages 55A and 56
- 5.) See Page 60
- 6.) See Page 54C
- 7.) See Page 64
- 8.) See Page 66
- 9.) See Page 51
- 10.) We have changed from a labeling system to a stenciling system. The stenciling system is faster and the stencils do not fall off as the labels did. See Page 65

Section G

1. See Page 81

2.) See Page 71

3.) See Page 77

4.) See Page 77

5.) See Page 78

Section I

1.) Closure cost estimates have been recomputed without applying any value to the wastes on site. This revised closure cost estimate has been submitted to the Director of the Ohio EPA along with the proper financial instruments to take care of closure costs.

2.) I-1d (1) - I have added more detail to the decontamination of containers.

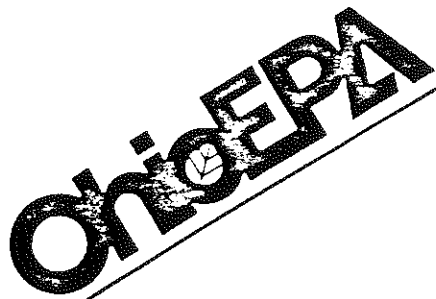
3.) I-5 - See #1 above.

4.) A Certificate of Insurance and a copy of the Hazardous Waste Facility Liability Endorsement are included in Appendix C - Exhibits 4 and 5.

General

- 1.) a. Drums on site - We presently have approximately 1,918 drums on site. Of these, 666 drums are "in Process" in different stages from full drums waiting to be pumped out, part full drums waiting to be dumped, to solid drums waiting to be inspected prior to stenciling and labeling for shipment to the Cecos Landfill. The remaining 1,252 drums are packaged, labeled, and ready to be shipped as flammable solid drums to the Cecos Landfill. We had been shipping our solid drums to the Cecos Landfill until March 15, 1984, when their active cell became full. They informed us there would be a one month delay until a new cell could be completed and approved. After the one month, there were additional delays. We have been following their progress week by week. We have been informed that Cecos will resume taking our drums some time in June. If they do this, we should have all of these drums shipped to them by the middle of July. Trying to anticipate the worst situation, we should have our drum level within compliance by the 1st of September. The "in Process" drums are all stored in Storage Area B. All of the flammable solid drums stored, ready for Cecos, have been individually inspected by our Lab personnel before labeling, stenciling and sealing. These drums are stacked on pallets, three high, with aisle space of 3 feet in Storage Areas A and E₁.

- 1.) b. Chem Fuel - We have written into the Waste Analysis Plan more specific detail on what goes into Chem Fuel and what does not go into Chem Fuel.
- 2.) The Waste Analysis Plan has been rewritten to include answers to your questions on decision makers, manifest discrepancies, rejection of material, and "authority to direct waste flow through the system".
- 3.) Not all bottoms materials go to the Chem Fuel production; these materials are segregated and packaged for disposal at Cecos Secure Landfill at Williamsburg, Ohio. The rewrite of the Waste Analysis Plan covers how and who makes the decision that directs material into the Chem Fuel Program.



JUNE, 1983

HOWARD RAY
HUKILL CHEMICAL CORPORATION

7013 KRICK ROAD
BEDFORD OH 44146

DEAR NPDES PERMIT HOLDER:

IT HAS BECOME NECESSARY FOR THE OHIO EPA TO CHANGE A PORTION OF YOUR PERMIT NUMBER TO FACILITATE PROCESSING OF INFORMATION. LISTED BELOW IS YOUR OLD NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT NUMBER AND THE NEW NUMBER YOU SHOULD NOW USE IN REFERRING TO YOUR PERMIT.

OLD OHIO NPDES PERMIT NUMBER: F336

NEW OHIO NPDES PERMIT NUMBER: 3IF00036

APPLICATION NUMBER: OH0063444

I TRUST THAT THIS CHANGE WILL PRESENT NO GREAT PROBLEMS FOR YOU. PLEASE USE YOUR NEW NPDES NUMBER IN ANY FUTURE CORRESPONDENCE. THE APPLICATION NUMBER WILL REMAIN UNCHANGED.

SINCERELY,

RALPH W. EVERETT, SUPERVISOR,
PERMITS & APPROVAL UNIT

ENCL. STATION SUMMARY



JUNE, 1983

HOWARD RAY
HUKILL CHEMICAL CORPORATION

7013 KRICK ROAD
BEDFORD OH 44146

DEAR NPDES PERMIT HOLDER:

COINCIDENT WITH THE ESTABLISHMENT OF A NEW PERMIT NUMBER MUST BE THE INCORPORATION OF THAT NEW NUMBER IN YOUR STATION CODES. FOR YOUR CONVENIENCE YOU WILL FIND LISTED BELOW YOUR OLD NUMBERS ALONG WITH THE NEWLY DERIVED NUMBERS AND THE CURRENT DESCRIPTION WE HAVE FOR YOUR REPORTING STATION(S). THIS INFORMATION HAS ALSO BEEN INCORPORATED IN PRE-PRINTED EPA-4500 REPORT FORMS GENERATED FOR YOUR FACILITY.

SINCERELY,

SANDRA J. TURNER, MANAGER,
PERMITS & COMPLIANCE PROGRAMS SECTION

STATION SUMMARY

OLD-ID.	NEW-ID.	DESCRIPTION
F336001	3IF00036001	001 AT PIPE OUTLET PRIOR TO MIXING WITH STREAM
F336601	3IF00036601	601 AT SAMPLING MANHOLE PRIOR TO CONNECTION INTO OF



Re: Hukill Chemical
OHD001926748/02-18-0315
Cuyahoga County

May 15, 1984

Mr. Robert L. Hukill
Hukill Chemical Corporation
7013 Krick Road
Bedford, OH 44146

RECEIVED
MAY 17 1984

WASTE MANAGEMENT
BRANCH

Dear Mr. Hukill:

On December 29, 1983, Mr. William Miner of U.S. EPA, Region V transmitted our adequacy comments on Hukill's Part B application in a letter addressed to yourself. In that letter you were given thirty days to respond to these adequacy comments. As of this date, neither Ohio EPA nor U.S. EPA has received a response from Hukill Chemical. Therefore, we have again included those same adequacy comments as an attachment to this letter.

Please note that this will be Ohio EPA's last attempt to gain a demonstration of compliance by Hukill Chemical for the deficiencies noted. We expect to receive a response which satisfactorily addresses these deficiencies by May 31, 1984. No extensions of this date will be granted by Ohio EPA. Furthermore, if a response is not received by May 31 that adequately addresses each item of deficiency, Ohio EPA will immediately recommend denial of your RCRA permit to U.S. EPA, along with termination of interim status.

Ohio EPA hopes to be able, in the near future, to recommend approval of your RCRA permit application. However, if you wish to obtain a RCRA permit, we must have your full cooperation by satisfactorily addressing all 40 CFR 264 and 270 regulations applicable to your facility.

If you have any questions on the above, please contact Milton Rinehart at (614) 462-6303.

Sincerely,

Dan T. Redman, P.E., Manager
Engineering Section
Div. of Solid and Hazardous Waste Management

cc: Paula Cotter/Ed Kitchen, S&ES, DSHWM
Tom Crepeau/file, P&MRS, DSHWM
Ben Pfefferle, Legal
Milton Rinehart, ES, DSHWM

Dave Wertz, NEDO
Steve White, Chief, DSHWM
Jim Mayka, U.S. EPA, Region V
Jim Brossman, U.S. EPA, Region V

0542T

PART B MATERIAL



Re: Hukill Chemical
Cuyahoga County
02-18-0315/OHD001926740

April 27, 1984

Mr. James Brossman
U.S. EPA, Region V - 5HW-12
230 South Dearborn Street
Chicago, IL 60604

Dear Mr. Brossman:

In your letter dated August 22, 1983, Mr. Robert Hukill of Hukill Chemical Incorporated was notified that the Part B permit application for the facility was complete and that technical review for adequacy would begin.

Your letter dated December 29, 1983 transmitted Ohio EPA's and U.S. EPA's comments regarding the adequacy of Hukill's Part B and requested a response to those comments by January 29, 1984. Ohio EPA has not received a response.

Ms. Deborah Tegtmeyer of our Technical Assistance and Waste Management Section sent a letter dated March 22, 1984 to Robert Hukill requesting corrected Letter of Credit, Standby Trust Agreement, and Certificate of Insurance by April 13, 1984. Ohio EPA has not received a response.

I request that U.S. EPA write to Hukill Chemical giving them a firm date for response to Ohio EPA's comments. If a response is not received by that date, U.S. EPA should levy an administrative fine against Hukill Chemical, and/or prepare a Draft Permit denial.

In the mean time, Ohio EPA will place Hukill's Part B in the inactive file until we receive the necessary information from Hukill Chemical.

Sincerely,

Timothy A. Lawrence, Mgr.
Engineering Section
Div. of Hazardous Materials Management

TAL/kjl

cc: Dan Banaszek, U.S. EPA - Region V
Milton Rinehart, ES, DHMM
Debbie Tegtmeyer, TA&WMS, DHMM
Dave Wertz, NEDO

0542T

RECEIVED
MAY 02 1984
WASTE MANAGEMENT
BRANCH

HUKILL CHEMICAL CORPORATION

7013 KRICK ROAD • BEDFORD, OHIO 44146 • 216/232-9400

Over Thirty-Five Years of Quality Products and Services

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FEB 06 1984

WASTE MANAGEMENT BRANCH
EPA REGION V

January 30, 1984

Mr. William H. Miner
RCRA Activities, Part B Permit Application
U.S. E.P.A. - Region V
P.O. Box A3587
Chicago, Illinois 60609-3587

Dear Mr. Miner:

We have received and are working on the Technical Comments to our Part B Application.

At this point, we are several weeks from completing all the information required. The limited amount of time in which to respond, and some personnel illness at this time of year, have combined to cause us to go over our deadline. I assure you that I will work to complete this task as soon as possible.

Inasmuch as the Technical Review took over a year to complete, I trust you will understand the time and energy it takes to cover such a detailed task as this and allow us an extension of time.

Very truly yours,

HUKILL CHEMICAL CORPORATION



Robert L. Hukill
Vice President
General Manager

RLH:dbk

cc: Mr. Jim Brosnan, U.S. EPA Region V
Mr. Tom Crepeau, OH MM-OEPA

received
2-8-84

COPY 1

053-13

DEC 29 1983

5HW-13

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Robert Hukill
Hukill Chemical Corporation
7013 Krick Road
Bedford, Ohio 44146

RE: Hukill Chemical Corp.
Part B Application
EPA ID #: OHD 001-926-740

Dear Mr. Hukill:

This letter is to notify you that we have reviewed your Part B application for technical adequacy. Our comments are attached.

Please review the attached comments and submit the indicated information, within 30 days, to:

RCRA Activities-Part B Permit Application
U.S. EPA-Region V
P.O. Box A3587
Chicago, Illinois 60609-3587

A copy of your response should also be sent to:

Mr. Tom Crepeau
DHMM - OEPA
361 East Broad Street
P.O. Box 1049
Columbus, Ohio 43216

If you have any questions about our review, please contact Mr. James Brossman, of my staff, at (312) 886-3718.

Sincerely yours,

ORIGINAL SIGNED BY
WILLIAM H. MINER

William H. Miner, Chief
Technical, Permits, and Compliance Section

Attachment

cc: Tom Crepeau, OEPA

bcc: Part B file
Jim Mayka
Ken Westlake
LaNita Marrable

5HW-13:JBrossman:PGRace:12-27-83

053-12

HUKILL CHEMICAL CO.
ADEQUACY COMMENTS TO FACILITY

Part A

- Section A 1) Please resolve these discrepancies:
- a) Old Part A NPDES # F 336 A D
New Part A NPDES # O H 006344
 - b) Old pg. 1 of 5 (Form 3) S01 55,000 gal and S02 150,000 gal
New S01 5,500 gal and S02 102,000 gal
 - c) Old pg. 3 of 5 (Form 3) has different quantities of D001 than new.
- 2) As discussed in a previous meeting, there is an error in the Part A application on page 1 of 5 in the S01 storage capacity entry. The volume you intended to list was 55,000 gallons, not the 5,500 now shown.

Facility Description

- Section B Please provide:
- 1) well logs of monitoring wells; and
 - 2) traffic patterns (B-4).

Section C

- 1) A description of what tests are done to determine compatibility of wastes needs to be added to the Waste Analysis.
- 2) More explanation is needed for the Group 5 materials. Please list a few more examples and what special handling and hazards are associated with the group.
- 3) What type of sampling technique is used on incoming wastes when the coliwasa is not used? What is the minimum number of samples taken on incoming drummed wastes? What is the maximum number of samples in composite waste samples?
- 4) What is the procedure for analyzing incoming potential chem-fuels wastes. Provide some examples of this analysis.

Containers

Section D

- 1) D-1a(1) Are containers new, reused, reconditioned, recycled? How are containers marked? Are containers and their wastes compatible?
- 2) D-1a(2) Assurance that containers are not opened, handled or stored in a manner that may rupture container or cause it to leak is missing. What are separation and aisle spacing distances? Identify possible ignition sources for flammables. Clearly define the design and operation of container staging areas. On drawing indicate outdoor container storage areas that receive full sunlight. Describe equipment used to move containers which store hazardous waste. How often are containers opened to add or remove waste?
- 3) D-1a(3)(a) Describe the compatibility of the types of waste stored with the base for both free liquids and non-free liquids drum storage areas.
- 4) Pg. 33 Describe how floor drains were sealed.
- 5) Pg. 35A Demonstrate that containers said to have no free liquids do in fact have no free liquids as per 40 CFR 122.25(b) or by some other documentation.
- 6) Pg. 33 Unable to determine 10% containment of free liquids in free liquid container storage area. Provide documentation based on optimum inventory of containers and dimensions of storage area which shows that 10% of free liquid volume will be contained.
- 7) Provide design parameters, dimensions and a description of construction materials for container storage areas. (The information presently available is inadequate.)
- 8) Plan Sheet 2 indicates two free liquid storage areas in separate buildings. Information requested in Item 6 above and required in the regulations are needed for both areas.
- 9) Pg. 34 What is "extra hazard class" sprinkler system? Please describe.
- 10) Pg. 35A How often are non-free liquid containers inspected?
- 11) Non-free liquid containers stacked four high cannot be properly inspected. Stack height should be reduced to two (ideally) or three (maximum) drums.

Tanks

- 1) Pg. 37 Provide minimum shell thickness for tank decommission and replacement. Describe procedure used to measure shell thickness; visual inspection is inadequate.
- 2) Provide design operating temperature and pressure information. Also provide specific gravity of liquids and maximum height of liquid in tanks.
- 3) What is year and number of U.L. standards for flammable liquid storage to which tanks are designed?
- 4) Provide detailed engineering drawings for each tank including specifications for foundation, structural support, seams, and pressure controls to demonstrate that tanks will not collapse or rupture.
- 5) Pg. 38 If the four tanks reserved for inbound recyclable solvent waste work as a group in concert with one another, then a detailed description of how this is done must be provided.
- 6) Provide piping and instrumentation diagram. Also, describe all piping used in process. Plan Sheet 13 is inadequate. If hoses are used instead of pipes in transferring wastes, then describe how hoses are used and what they are made of.
- 7) Describe procedures used to measure: 1) temperature; 2) pressure; 3) flow level; and 4) specific gravity of wastes in tanks and indicate how frequently measures are taken.

Diagrams

- 1) Plan Sheet 8 indicates slope to the left and flow to the bottom towards API separator - how can this be? Please explain.
- 2) Is secondary containment tank on Plan Sheet 9 the same as TSI Oil-Water separator tank on Plan Sheet 10? Where are they located on blueprints? What is the relation of these two tanks to Outfall 001 and Outfall 601 on Plan Sheet 2?
- 3) What underlies compacted gravel pad for tanks on Plan Sheet 11B?
- 4) Plan Sheet 13 is not drawn to scale and does not adequately show flow process equipment in spatial relation to other equipment and to facility.

- 5) The drum storage (or staging) areas now used on the loading dock and north of the processing area are not shown on the facility diagrams.

Inspections

Section F

- 1) Generally inspection schedule does not contain as much detail as desired. For example, no inspection information is given for piping. Also, under types of problems, the schedule simply looks at whether or not equipment is present or operable, not at potential for failure under use. More detail is needed.
- 2) Inspection schedule should require daily inspections of loading and unloading areas when in use and equipment therein.
- 3) F-2(b)(1) Not enough detail in container inspection schedule. For example, what "irregularities" (pg. 55) will inspection cover? What "signs of deterioration" will be looked for? What appropriate information will be recorded?
- 4) F-2(b)(2) Not enough detail in tank inspection. Application (pg. 56) states what will be inspected, not how. Describe how inspection will be done and specifically what criteria inspector will use to determine serviceability of equipment.
- 5) F-4(a)(2) Describe the techniques or procedures for preventing spills while deheading containers.
- 6) F-4(d) Emergency lighting system should be included in inspection schedule.
- 7) Describe precautions taken using fork lift to avoid rupture of containers and ignition of ignitable wastes. Is fork lift electric or combustion powered?
- 8) F-5(e) Demonstration of compliance with National Fire Protection Association's buffer zone requirement is missing and should be provided.
- 9) The Security section [p. 51, F-1a(2)(2)] should be revised to describe the facility as it now exists with the additional fencing and gates.
- 10) Is the "Internal label" system described on p. 65 now in use at the company? Field inspectors do not recall observing the labels as described.

Section G

- 1) On p. 81, Section G-8, you must add that a required report must be submitted to the Director of the Ohio EPA (OAC 3745-54-56-J).
- 2) What assurances are there that the emergency coordinators will be reached at all times, including holidays? Is someone scheduled to be "on call" to cover all of these times?
- 3) On p. 77 you need to expand on the techniques that will be used to contain spills in the container storage area.
- 4) On p. 77 it is unclear where spilled materials will be pumped. Is there a tank dedicated for this purpose?
- 5) What method will be used to test a tank after it is repaired?

Section I

- 1) Closure cost estimates must be computed without applying any value to the wastes on the site.
- 2) I-10(1) Describe decontamination procedure for containers.
- 3) I-5 The financial instruments are correct and adequate. However, should the closure plan and cost estimate prove to be inadequate, then the amount of coverage provided by the financial instruments must be changed accordingly.
- 4) I-8 The liability limits appear to be adequate. However, the standard certification of insurance must be accompanied by a Hazardous Waste Facility Certificate of Liability Insurance [worded as 264.151(j)] or a Hazardous Waste Facility Liability Endorsement [worded as 264.151(i)].

General

- 1) Two general areas of concern are the number of barrels currently on the site and the chem-fuels program. It appears that both of these areas are being considered by U.S. EPA. The drum inventory will be handled by some type of compliance schedule and clarification is needed from Washington on the blending of listed wastes in the chem-fuels and on the sham recycling issue.

- 2) In general, it is still not clear to the reviewer who the decision makers are in the Waste Analysis Plan. Who is responsible for determining manifest discrepancies? When, if ever, will a load of waste be rejected? Who has authority to direct waste flow through the system including the fuels program?
- 3) It would be helpful if the company could clarify specifically which still bottoms are incorporated into the fuels. The discussion on page 16 indicates that all bottoms go to the fuels program. That is inconsistent with verbal representations made at the time of our Part B site inspection. Specific information regarding what bottoms go to the fuels program will be necessary to determine compliance with Waste Analysis requirements and the legitimacy of the fuels program in light of 40 CFR 261.6 and policy guidances from U.S. EPA regarding hazardous waste burned as fuels.

0307T

OhioEPA

Re: Hukill Chemical Co.
OHD001926740

October 4, 1983

Mr. James Mayka
State Implementation Officer
U.S. EPA, Region V - 5AHWM
230 South Dearborn St.
Chicago, IL 60604

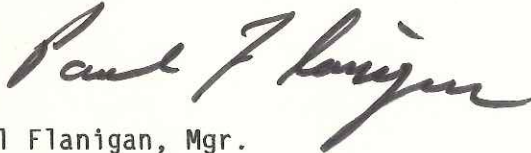
Dear Mr. Mayka:

After several unfortunate delays, Ohio EPA has completed its adequacy review of Hukill Chemical Company's RCRA Permit Part B application (OHD001926740). Our adequacy comments to the facility are attached.

Because these comments are being submitted after the due date, Ohio EPA is also requesting in this correspondence an extension of the permit due date. This extension is needed to allow the facility to respond to the adequacy comments and to complete processing of this application.

Please call Milton Rinehart (614/466-1596) if you have any comments or questions regarding this permit application. Thank you for your continued cooperation.

Yours truly,



Paul Flanigan, Mgr.
Engineering Section
Div. of Hazardous Materials Management

PF/kjl

cc: Jim Brossman, Region V
Milton Rinehart, ES, DHMM
Tom Crepeau/file, P&MRS, DHMM
Dave Wertz, NEDO
Tom Carlisle, TA&WMS, DHMM

0313T

RECEIVED
OCT 07 1983

WASTE MANAGEMENT
BRANCH

received
10-25-83

HUKILL CHEMICAL CO.
ADEQUACY COMMENTS TO FACILITY

Part A

Section A 1) Please resolve these discrepancies:

- a) Old Part A NPDES # F 336 A D
New Part A NPDES # O H 006344
 - b) Old pg. 1 of 5 (Form 3) S01 55,000 gal and S02 150,000 gal
New S01 5,500 gal and S02 102,000 gal
 - c) Old pg. 3 of 5 (Form 3) has different quantities of D001 than new.
- 2) As discussed in a previous meeting, there is an error in the Part A application on page 1 of 5 in the S01 storage capacity entry. The volume you intended to list was 55,000 gallons, not the 5,500 now shown.

Facility Description

Section B Please provide:

- 1) well logs of monitoring wells; and
- 2) traffic patterns (B-4).

Section C

- 1) A description of what tests are done to determine compatibility of wastes needs to be added to the Waste Analysis.
- 2) More explanation is needed for the Group 5 materials. Please list a few more examples and what special handling and hazards are associated with the group.
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Section D

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- 7) Provide design parameters, dimensions and a description of construction materials for container storage areas. (The information presently available is inadequate.)
- 8) Plan Sheet 2 indicates two free liquid storage areas in separate buildings. Information requested in Item 6 above and required in the regulations are needed for both areas.
- 9) Pg. 34 What is "extra hazard class" sprinkler system? Please describe.
- 10) Pg. 35A How often are non-free liquid containers inspected?
- 11) Non-free liquid containers stacked four high cannot be properly inspected. Stack height should be reduced to two (ideally) or three (maximum) drums.

Tanks

- 1) Pg. 37 Provide minimum shell thickness for tank decommission and replacement. Describe procedure used to measure shell thickness; visual inspection is inadequate.
- 2) Provide design operating temperature and pressure information. Also provide specific gravity of liquids and maximum height of liquid in tanks.
- 3) What is year and number of U.L. standards for flammable liquid storage to which tanks are designed?
- 4) Provide detailed engineering drawings for each tank including specifications for foundation, structural support, seams, and pressure controls to demonstrate that tanks will not collapse or rupture.
- 5) Pg. 38 If the four tanks reserved for inbound recyclable solvent waste work as a group in concert with one another, then a detailed description of how this is done must be provided.
- 6) Provide piping and instrumentation diagram. Also, describe all piping used in process. Plan Sheet 13 is inadequate. If hoses are used instead of pipes in transferring wastes, then describe how hoses are used and what they are made of.
- 7) Describe procedures used to measure: 1) temperature; 2) pressure; 3) flow level; and 4) specific gravity of wastes in tanks and indicate how frequently measures are taken.

Diagrams

- 1) Plan Sheet 8 indicates slope to the left and flow to the bottom towards API separator - how can this be? Please explain.
- 2) Is secondary containment tank on Plan Sheet 9 the same as TSI Oil-Water separator tank on Plan Sheet 10? Where are they located on blueprints? What is the relation of these two tanks to Outfall 001 and Outfall 601 on Plan Sheet 2?
- 3) What underlies compacted gravel pad for tanks on Plan Sheet 11B?
- 4) Plan Sheet 13 is not drawn to scale and does not adequately show flow process equipment in spatial relation to other equipment and to facility.

- 5) The drum storage (or staging) areas now used on the loading dock and north of the processing area are not shown on the facility diagrams.

Inspections

Section F

- 1) Generally inspection schedule does not contain as much detail as desired. For example, no inspection information is given for piping. Also, under types of problems, the schedule simply looks at whether or not equipment is present or operable, not at potential for failure under use. More detail is needed.
- 2) Inspection schedule should require daily inspections of loading and unloading areas when in use and equipment therein.
- 3) F-2(b)(1) Not enough detail in container inspection schedule. For example, what "irregularities" (pg. 55) will inspection cover? What "signs of deterioration" will be looked for? What appropriate information will be recorded?
- 4) F-2(b)(2) Not enough detail in tank inspection. Application (pg. 56) states what will be inspected, not how. Describe how inspection will be done and specifically what criteria inspector will use to determine serviceability of equipment.
- 5) F-4(a)(2) Describe the techniques or procedures for preventing spills while deheading containers.
- 6) F-4(d) Emergency lighting system should be included in inspection schedule.
- 7) Describe precautions taken using fork lift to avoid rupture of containers and ignition of ignitable wastes. Is fork lift electric or combustion powered?
- 8) F-5(e) Demonstration of compliance with National Fire Protection Association's buffer zone requirement is missing and should be provided.
- 9) The Security section [p. 51, F-1a(2)(2)] should be revised to describe the facility as it now exists with the additional fencing and gates.
- 10) Is the "Internal label" system described on p. 65 now in use at the company? Field inspectors do not recall observing the labels as described.

Section G

- 1) On p. 81, Section G-8, you must add that a required report must be submitted to the Director of the Ohio EPA (OAC 3745-54-56-J).
- 2) What assurances are there that the emergency coordinators will be reached at all times, including holidays? Is someone scheduled to be "on call" to cover all of these times?
- 3) On p. 77 you need to expand on the techniques that will be used to contain spills in the container storage area.
- 4) On p. 77 it is unclear where spilled materials will be pumped. Is there a tank dedicated for this purpose?
- 5) What method will be used to test a tank after it is repaired?

Section I

- 1) Closure cost estimates must be computed without applying any value to the wastes on the site.
- 2) I-1D(1) Describe decontamination procedure for containers.
- 3) I-5 The financial instruments are correct and adequate. However, should the closure plan and cost estimate prove to be inadequate, then the amount of coverage provided by the financial instruments must be changed accordingly.
- 4) I-8 The liability limits appear to be adequate. However, the standard certification of insurance must be accompanied by a Hazardous Waste Facility Certificate of Liability Insurance [worded as 264.151(j)] or a Hazardous Waste Facility Liability Endorsement [worded as 264.151(i)]. Note also that the current policy expires 8/9/83.

General

- 1) Two general areas of concern are the number of barrels currently on the site and the chem-fuels program. It appears that both of these areas are being considered by U.S. EPA. The drum inventory will be handled by some type of compliance schedule and clarification is needed from Washington on the blending of listed wastes in the chem-fuels and on the sham recycling issue.

- 2) In general, it is still not clear to the reviewer who the decision makers are in the Waste Analysis Plan. Who is responsible for determining manifest discrepancies? When, if ever, will a load of waste be rejected? Who has authority to direct waste flow through the system including the fuels program?
- 3) It would be helpful if the company could clarify specifically which still bottoms are incorporated into the fuels. The discussion on page 16 indicates that all bottoms go to the fuels program. That is inconsistent with verbal representations made at the time of our Part B site inspection. Specific information regarding what bottoms go the fuels program will be necessary to determine compliance with Waste Analysis requirements and the legitimacy of the fuels program in light of 40 CFR 261.6 and policy guidances from U.S. EPA regarding hazardous waste burned as fuels.

0307T

2 2 AUG 1983

5HW-13

Mr. Robert L. Hukill
Hukill Chemical Corporation
7013 Krich Road
Bedford, Ohio 44146

RE: Hukill Chemical Corporation
Part B Application
U.S. EPA ID #: OHD 001 926 740

Dear Mr. Hukill:

This letter is to notify you, as required by 40 CFR 124.3(c), that we have reviewed your Part B application and have now determined your permit application to be complete. This determination means only that all items required by 40 CFR 270.14-270.19 have been addressed.

We now begin an "adequacy review", during which we analyze the technical aspects of the application in-depth, in order to make a tentative decision to either prepare a draft permit or deny the application. We will be working cooperatively with the Ohio Environmental Protection Agency (OEPA) throughout the course of this review. Please understand that either, or both of our agencies may request additional information from you, if it is necessary to clarify, modify, or supplement previously submitted material. Timely response on your part to any such requests should allow us to advise you of our tentative decision within 90 days of today's date.

Subsequent to that decision, either a draft permit or a "notice of intent to deny" will be publicly noticed and made available for public comment, with an opportunity provided for a public hearing. After the close of the public comment period, our Agency will issue a final permit decision. The timing of the public notice, hearing, and final permit decision by our Agency may be scheduled to coincide with any similar activities being conducted by the State of Ohio Hazardous Waste Facility Approval Board (HWFAB).

Please contact Mr. James Brossman of my staff, at (312) 886-3785, if you have further questions or desire additional information.

Sincerely yours,

William H. Miner, Chief
Technical, Permits, and Compliance Section
Waste Management Branch

cc: Paul Flanigan, OEPA
Peggy Vince, HWFAB
Tom Crepeau, OEPA

bcc: Jim Mayka, Ohio SIO
Ken Westlake, SS

5HW-13:Jim Brossman:fs:8/19/83

053-10

Emr 8/25/83

INITIALS	TYPIST	AUTHOR	STU #1 CHIEF	STU #2 CHIEF	STU #3 CHIEF	TPS CHIEF	WMB CHIEF	WMD DIRECTOR
	pk 8/24/83			DJB 8-25-83		Woff 8-26-83		



Re: Hukill Chemical Co.
OHD001926740

March 29, 1983

Kathy Homer, State Implementation Officer
U.S. EPA, Region V
Waste Management Branch-5HW13
230 South Dearborn St.
Chicago, IL 60604

Dear Kathy:

The Division of Hazardous Materials Management has conducted an administrative review of the additional information submitted by Hukill Chemical Company in response to our initial completeness review. This Part B application was reviewed for completeness pursuant to regulations published in 40 CFR 122.25, 124.3 and Part 264.

The addition of this recently submitted information has been judged to have completed the application in accordance with all applicable regulations. This determination was made by Central Office personnel. The DHMM will begin the adequacy review of this application.

If you have any questions about our review, please feel free to contact Milton Rinehart at (614) 466-1596.

Sincerely,

Paul Flanigan, Mgr.
Engineering Section
Div. of Hazardous Materials Management

PF/mr/kjl

cc: Chuck Wilhelm, Chief, DHMM
Bill Skowronski, NEDO
Tom Crepeau/file, P&MRS, DHMM
Milton Rinehart, ES, DHMM
Tom Carlisle, TA&WMS, DHMM
Ken Westlake, U.S. EPA, Region V
Karen Heyob, ES, DHMM

RECEIVED
MAR 31 1983

WASTE MANAGEMENT
BRANCH

053-8

MAR 17 1983

5HW-13

Mr. Tom Crepeau
DHMM - OEPA
361 East Broad Street
P.O. Box 1049
Columbus, Ohio 43216

RE: Hazardous Waste Part B Permit Application

Facility EPA ID #: OHD 001-926-740
Facility Name: Hukill Chemical Corp.
Facility Address: 7013 Krick Road
Bedford, Ohio

Dear Mr. Crepeau:

By now you should have received additional Part B permit information requested for the above-referenced facility.

Your agency is requested to perform a completeness check of this additional information, prepare comments and draft a deficiency letter *if* appropriate. Please forward your review comments, and draft letter to this office by April 4, 1983.

Please contact Mr. James Brossman, the responsible U.S. EPA person at (312) 886-3785, if you have any questions regarding the application.

Sincerely yours,

William H. Miner, Chief
Technical, Permits and Compliance Section

Enclosure

bcc: Ken Westlaks (SS)
Kathy Homer (SIO)

5HW:Jim Brossman:pg:3-14-83

INITIALS	DATE	3/14/83	TYPYST	3/15/83	AUTHOR	STU #1 CHIEF	STU #2 CHIEF	STU #3 CHIEF	TPS CHIEF	WMB CHIEF	WMD DIRECTOR
							3/17/83				

053-7

DEC 01 1982

SHW-TUB

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Robert Hukill
Hukill Chemical Corporation
7013 Krick Road
Bedford, Ohio 44146

RE: Part B permit
EPA ID # OH0001926740

Dear Mr. Hukills:

Your Part B permit application has been reviewed for completeness pursuant to regulations published in 40 CFR Parts 122.25, 124.3 and 264.

As indicated in the attached completeness checklist, several required items were not included. A brief discussion of the deficiencies found is included in the comments section attached to the checklist. To complete your application, please submit the indicated items within 30-days of your receipt of this notice.

Please contact Mr. James Brossman at (312) 886-3785, if you have any questions concerning our review.

Sincerely,

William H. Miner, Chief
Technical, Permits and Compliance Section

Enclosure

cc: Tom Crepeau, Ohio EPA
bcc: Kathy Homer
~~Jodi Traub~~ Ken Westlake
Rick Karl
LaNita Marrable

Permit Application Checklist

Following is the permit application checklist used to detect omissions in a Part B application. Only items for which lines are provided should be checked.

Facility name HUKILL CHEMICAL CORPORATION

Facility address 7013 KRICK ROAD
BEDFORD, OHIO 44146

Type of facility S01, S02

Facility contact ROBERT HUKILL (216) 232-9400

Date of application submission 10-29-82

PERMIT APPLICATION CHECKLIST (continued)

		Provided	Not provided	Not applicable	Comments
D-1b(3)	Description of container management practices (opening, handling, and storage procedures) to insure container integrity	X			
D-1b(4)	Containment system: a description of how design promotes drainage and removal of precipitation or how containers are kept from contact with free standing liquids		X		Comment #5
D-2	Tanks				
D-2a	References to design standards or other available information used in tank design construction, and information about tank dimensions, capacity, and shell thickness	X			p. 37
D-2b	Description of design specifications including identification of construction and lining materials for assessment of corrosion and erosion potential	X			p. 37
D-2c	Diagram of piping, instrumentation, and process flow, and a description of feed systems, safety cut-off, bypass systems, and pressure controls (e.g., vents)	X			p. 38
D-3	Waste piles				
D-3a	Waste piles with free liquids				
D-3a(1)	Description of practices to control wind dispersal of hazardous waste			X	
D-3a(2)	Description of measures to divert run-on away from the pile			X	
D-3a(3)	Description of the leachate and run-off collection and control system. Includes a description of design and operating procedures to properly manage and dispose of any leachate that is a hazardous waste			X	
D-3a(4)	Description of the foundation supporting the base			X	
D-3a(5)	Waste pile base				
D-3a(5)(a)	Design specifications of the pile base and containment system (or liners) that includes estimated containment life of the base, the permeability of the liner(s), and the estimated life of the hazardous waste pile. Information on the characteristics of the waste or leachate to which the liners are exposed, or:			X	

PERMIT APPLICATION CHECKLIST (continued)

	Provided	Not provided	Not applicable	Comments
D-3a(5)(b)	A description of the leachate detection, collection, and removal system relative to the water table and a description of any efforts to control water table			
			X	
D-3a(6)	Description of efforts to protect the containment system from vegetation growth which could puncture any component of the system			
			X	
D-3a(7)	Description of the equipment and procedures utilized for waste pile movement			
			X	
D-3b	Waste pile without free liquids			
D-3b(1)	Documentation/information to show that a waste pile does not contain free liquids, and will not generate leachate during management of the pile			
			X	
D-3b(2)	Description of how the pile is protected from dispersal by wind			
			X	
D-3b(3)	Description of how the pile is protected from surface water run-on			
			X	
D-3b(4)	Demonstration that materials containing free liquids are not placed in the pile			
			X	
D-4	Surface impoundments (reserved)			
D-5	Incinerators (reserved)			
E.	GROUND WATER MONITORING PROGRAM (RESERVED)			
F.	PROCEDURES TO PREVENT HAZARDS			
F-1	Security			
F-1a	Description of security procedures and equipment:			
F-1a(1)	24-hour surveillance system, or:			
			X	
F-1a(2)	Barrier and means to control entry			
			X	
F-1a(3)	Warning signs			
				p. 51-52
				p. 52
F-1b	If included, a request for waivers that demonstrate an intruder would not be injured or cause a RCRA violation			
			X	
F-2	A copy of the inspection schedule			
		X		

PERMIT APPLICATION CHECKLIST (continued)

		Provided	Not provided	Not applicable	Comments
I-8	Liability requirements (reserved)	X			pg. 115-116
I-9	Proof of coverage by a state financial mechanism if state has equivalent or greater liability requirements for financial assurance for closure and post-closure care			X	

J. OTHER FEDERAL LAWS

PERMIT APPLICATION CHECKLIST (continued)

		Provided	Not provided	Not applicable	Comments
G-7	A copy of the evacuation plan		X		Comment #10, p. 80
G-8	A description of provisions for submittal of required reports	X			p. 80-81
H. PERSONNEL TRAINING					
	Description of the introductory and continuing training programs	X			p. 83-91
H-1	An outline of the training program which should briefly describe:				
H-1a	Job titles, duties, and name of each employee receiving training	X			Comment #12, p. 83, 84-89
H-1b	Content, frequency, and technique used in both introductory and continuing training for each employee		X		Comment #11, p. 89
H-1c	Training director's qualifications	X			p. 83, 90-91
H-1d	Relevance of training to job position	X			Comment #12, p. 84-89
H-1f	Training for emergency response		X		Comment #13
H-2	Provisions for implementing the training program		X		Comment #14, p. 83
I. CLOSURE REQUIREMENTS					
I-1	A copy of the closure plan, including the following:		X		Comment #15, p. 97-98
	° Schedule for closure		X		Comment #16
	° Description of decontamination or disposal of equipment				
	° Closure procedures for containers, tanks, surface impoundments, waste piles and incinerators, as applicable	X			p. 94-96
	° Maximum waste inventory	X			p. 93
I-1a	If applicable, a description of partial closure including partial closure activities			X	
I-1b	A description of final closure activities and how these will be conducted according to the regulations	X			p. 94-96
I-1c	A description of the maximum waste inventory in storage and treatment at any time during the life of the facility	X			p. 93

HUKILL CHEMICAL CORPORATION
PERMIT APPLICATION COMMENTS

1. Please include a general description, hazardous characteristics, the basis for hazardous designation and a laboratory report detailing chemical and physical analyses for the listed F wastes handled at the facility. [40 CFR 122.25(a)(2) and 264.13(a)]
2. A description of the procedures used to inspect and/or analyze wastes generated off-site must be included in the Part B application. [40 CFR 122.25(a)(3) and 264.13(c)]
3. Please include a description of procedures used to analyze and remove accumulated liquids from the secondary containment system to prevent overflow. [40 CFR Parts 122.25(b)(1)(i)(E) and 264.175(b)(5)]
4. For areas that are used to store containers of wastes that do not contain free liquids, documentation must show that the wastes do not contain free liquids. [40 CFR 122.25(b)(1)(ii)(A)]
5. A description of how containers of waste containing no free liquids are kept from contact with accumulated precipitation must be included. [40 CFR Parts 122.25(b)(1)(ii)(B) and 264.175(c)]
6. The inspection schedule must include a schedule for inspection of security devices, monitoring devices and safety and emergency equipment. [40 CFR 122.25(a)(5), 264.15, and 264.33]
7. Please include more detailed information about the management of incompatible wastes in tanks. [40 CFR 122.25(b)(2)(vi) and 264.198]
8. Please include a facility drawing detailing the location of all safety and emergency equipment. [40 CFR 264.52(e)]
9. In the description of coordination agreements, please include measures taken to familiarize local police and fire departments and hospitals with the facility and actions needed in case of emergency. [40 CFR 264.52(c) and 264.37]
10. Please include a copy of the evacuation routes for the facility (Figure G-2) and the criteria for beginning an evacuation. [40 CFR 264.52(f)]
11. Please include a description of the frequency of training and techniques used in the introductory and continuing training programs. [40 CFR 122.25(a)(12), 264.16(d)(3) and 264.16(c)]
12. The duties of each person receiving hazardous waste training and demonstration of relevance of that training to the job position should be provided for all employees in the hazardous waste training file, not just select groups. [40 CFR 264.16(d)(1), 264.16(d)(2) and 264.16(1)]
13. Demonstration that facility personnel are trained to be able to respond effectively to emergencies and are familiar with emergency procedures, emergency equipment and emergency systems. [40 CFR Part 264.16(a)(3)]
14. Please include demonstration that training has been successfully completed by facility personnel within 6 months of their employment or assignment to a facility or transfer to a new position at the facility. Records documenting that the required training has been successfully completed by facility personnel must be maintained. [40 CFR 264.16(d)(4) and 264.16(b)]
15. Please provide a schedule for closure giving the estimated periods of time that will be required to complete each closure activity. [40 CFR 264.113(e) and 264.113(b)]

HUKILL CHEMICAL CORPORATION
PERMIT APPLICATION COMMENTS
PAGE 2

16. Please provide a description of how all facility equipment and structures will be decontaminated or disposed of when closure is completed.
[40 CFR Part 264.114]
17. Please provide a copy of the established financial assurance mechanism for facility closure. [40 CFR Parts 122.25(a)(15) and 264.143]



Jim B

Re: Cuyahoga County
Hazardous Waste
Permit #02-18-0315

November 10, 1982

Kathy Homer, State Implementation Officer
U.S. EPA, Region V
Waste Management Branch
230 South Dearborn Street
Chicago, IL 60604

Dear Kathy:

The Division of Hazardous Materials Management has conducted an administrative review of the Part B permit application submitted by Hukill Chemical Corporation. This application was reviewed for completeness pursuant to regulations published in 40 CFR Parts 122.25 and 124.3 and 40 CFR Part 264.

As indicated in the attached completeness checklist, several required items were not included. A brief discussion of the deficiencies found is included in the comments section attached to the checklist.

If you have any questions about our review, please feel free to contact Karen Heyob at (614) 462-8415.

Yours truly,

A handwritten signature in cursive script, reading "Paul Flanigan", is written over a horizontal line.

Paul Flanigan, Manager
Engineering Section
Div. of Hazardous Materials Management

PF/kh/kjl

Attachment

cc: Chuck Wilhelm, Chief, DHMM
Bill Skowronski, NEDO
Tom Carlisle, TA&WMS, DHMM
Tom Crepeau/file, P&MRS, DHMM
Martha Gibbons, DHMM
Karen Heyob, ES, DHMM

053-3

HUKILL CHEMICAL CORPORATION
PERMIT APPLICATION COMMENTS

1. Please include a general description, hazardous characteristics, the basis for hazardous designation and a laboratory report detailing chemical and physical analyses for the listed F wastes handled at the facility. [40 CFR 122.25(a)(2) and 264.13(a)]
2. A description of the procedures used to inspect and/or analyze wastes generated off-site must be included in the Part B application. [40 CFR 122.25(a)(3) and 264.13(c)]
3. Please include a description of procedures used to analyze and remove accumulated liquids from the secondary containment system to prevent overflow. [40 CFR Parts 122.25(b)(1)(i)(E) and 264.175(b)(5)]
4. For areas that are used to store containers of wastes that do not contain free liquids, documentation must show that the wastes do not contain free liquids. [40 CFR 122.25(b)(1)(ii)(A)]
5. A description of how containers of waste containing no free liquids are kept from contact with accumulated precipitation must be included. [40 CFR Parts 122.25(b)(1)(ii)(B) and 264.175(c)]
6. The inspection schedule must include a schedule for inspection of security devices, monitoring devices and safety and emergency equipment. [40 CFR 122.25(a)(5), 264.15, and 264.33]
7. Please include more detailed information about the management of incompatible wastes in tanks. [40 CFR 122.25(b)(2)(vi) and 264.198]
8. Please include a facility drawing detailing the location of all safety and emergency equipment. [40 CFR 264.52(e)]
9. In the description of coordination agreements, please include measures taken to familiarize local police and fire departments and hospitals with the facility and actions needed in case of emergency. [40 CFR 264.52(c) and 264.37]
10. Please include a copy of the evacuation routes for the facility (Figure G-2) and the criteria for beginning an evacuation. [40 CFR 264.52(f)]
11. Please include a description of the frequency of training and techniques used in the introductory and continuing training programs. [40 CFR 122.25(a)(12), 264.16(d)(3) and 264.16(c)]
12. The duties of each person receiving hazardous waste training and demonstration of relevance of that training to the job position should be provided for all employees in the hazardous waste training file, not just select groups. [40 CFR 264.16(d)(1), 264.16(d)(2) and 264.16(1)]
13. Demonstration that facility personnel are trained to be able to respond effectively to emergencies and are familiar with emergency procedures, emergency equipment and emergency systems. [40 CFR Part 264.16(a)(3)]
14. Please include demonstration that training has been successfully completed by facility personnel within 6 months of their employment or assignment to a facility or transfer to a new position at the facility. Records documenting that the required training has been successfully completed by facility personnel must be maintained. [40 CFR 264.16(d)(4) and 264.16(b)]
15. Please provide a schedule for closure giving the estimated periods of time that will be required to complete each closure activity. [40 CFR 264.113(e) and 264.113(b)]

HUKILL CHEMICAL CORPORATION
PERMIT APPLICATION COMMENTS
PAGE 2

16. Please provide a description of how all facility equipment and structures will be decontaminated or disposed of when closure is completed.
[40 CFR Part 264.114]
17. Please provide a copy of the established financial assurance mechanism for facility closure. [40 CFR Parts 122.25(a)(15) and 264.143]

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS

SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, \$300



RETURN
TO



STW-TUB

James Brossman

U.S. Environmental Protection Agency
Region V
230 South Dearborn
Chicago, Illinois 60604
(City, State, and ZIP Code)

PS Form 3811, Dec. 1980

● **SENDER:** Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space
on reverse.

(CONSULT POSTMASTER FOR FEES)

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☐ Show to whom and date delivered —¢

☐ Show to whom, date, and address of delivery.. —¢

2. ☐ **RESTRICTED DELIVERY** —¢

(The restricted delivery fee is charged in addition to
the return receipt fee.)

TOTAL \$ _____

3. **ARTICLE ADDRESSED TO:** Mr. Robert Huk. II
Hukill Chemical Corporation
7013 Krick Road
Bedford, Ohio 44146

4. **TYPE OF SERVICE:**

☐ REGISTERED ☐ INSURED

☒ CERTIFIED ☐ COD

☐ EXPRESS MAIL

ARTICLE NUMBER

P391345967

(Always obtain signature of addressee or agent)

I have received the article described above.

SIGNATURE ☐ Addressee ☐ Authorized agent

5. **DATE OF DELIVERY**

12/6/82

6. **ADDRESSEE'S ADDRESS** (Only if requested)

7. **UNABLE TO DELIVER BECAUSE:**

7a. **EMPLOYEE'S
INITIALS**

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL



DEC 01 1982

5HW-TUB

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Robert Hukill
Hukill Chemical Corporation
7013 Krick Road
Bedford, Ohio 44146

RE: Part B permit
EPA ID # OH0001926740

Dear Mr. Hukills:

Your Part B permit application has been reviewed for completeness pursuant to regulations published in 40 CFR Parts 122.25, 124.3 and 264.

As indicated in the attached completeness checklist, several required items were not included. A brief discussion of the deficiencies found is included in the comments section attached to the checklist. To complete your application, please submit the indicated items within 30-days of your receipt of this notice.

Please contact Mr. James Grossman at (312) 886-3785, if you have any questions concerning our review.

Sincerely,

William H. Miner, Chief
Technical, Permits and Compliance Section

Enclosure

cc: Tom Crepeau, Ohio EEA
bcc: Kathy Homer
~~Jodi Traub~~ Ken Westlake
Rick Karl
LaNita Marrable



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

PART B MATERIAL

OCT 25 1982

REPLY TO ATTENTION OF:

5HW-TUB

Mr. Paul Flanigan
DHMM - OEPA
361 East Broad Street
P.O. Box 1049
Columbus, Ohio 43216

RE: Hazardous Waste Part B Permit Application

Facility EPA ID #: OHD001926740
Facility Name: Hukill Chemical Corp.
Facility Address: Bedford

Dear Mr. Flanigan:

Enclosed is a copy of the Part B application and correspondence for the above referenced facility.

Your agency is requested to perform a completeness check of the application, prepare comments, and draft a deficiency letter if appropriate. Please forward the filled-in checklist, review comments, and draft letter to this office by November 15, 1982. This will allow my staff 2 weeks to review the comments and issue the letter before expiration of the allotted 60 days review period.

Please contact Mr. Richard Karl, the responsible U.S. EPA person at (312) 886-7447, if you have any questions regarding the application.

Sincerely yours,

William H. Miner, Chief
Technical, Permits and Compliance Section

Enclosure

053-2



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V

111 West Jackson Blvd.
CHICAGO, ILLINOIS 60604

REPLY TO ATTENTION OF:
RCRA ACTIVITIES

Mr. Robert L. Hukill
General Manager
Hukill Chemical Corp.
7013 Krick Road
Bedford, Ohio 44146

RE: OHD000926740
Hukill Chemical Corp.
Bedford, Ohio

Dear Mr. Hukill:

To facilitate the processing of hazardous waste permit applications, we are making two additional requirements concerning the format of these applications:

1. Please uniquely number each page of the application including all attachments (maps, specifications, etc.)
2. If you claim parts of your application as confidential, please provide us with a public information copy of the application. The public information copy must be identical to the full application with the exclusion of the confidential information.

If you have any questions, please call the person indicated in the Part B request letter. Thank you for your cooperation.

Sincerely yours,


Karl J. Klepitsch, Jr., Chief
Waste Management Branch

FILE

053-16



MAY 20 1982

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V

111 West Jackson Blvd.
CHICAGO, ILLINOIS 60604

REPLY TO ATTENTION OF:

5HW-TUB

*Should be
OH D001926740*

Mr. Robert L. Hukill
Hukill Chemical Corp.
7013 Krick Road
Bedford, Ohio 44146

RE: EPA ID# OHD001926740
Hukill Chemical Corp.
Bedford, Ohio 44146

Dear Mr. Hukill:

Recently, we requested you to submit a Part B application for the above-referenced hazardous waste facility under the Resource Conservation and Recovery Act, as amended (RCRA) permit program.

In an attempt to coordinate the review of your application with the Ohio Environmental Protection Agency (OEPA), and striving for a simultaneous issuance or denial of Federal and State hazardous waste facility permits, we urge you to submit three copies of your Part B to OEPA at the same time it is submitted to this Agency. The mailing address for OEPA is:

Ohio Environmental Protection Agency
Division of Hazardous Materials Management
361 East Broad Street Box 1049
Columbus, Ohio 43216

Your direct submittal is necessary to allow OEPA to begin processing under Ohio state law. If you send copies directly to OEPA, you need send only three (rather than four) copies to USEPA.

If you have questions concerning the Ohio permitting process, please contact Mr. Paul Flanigan of OEPA at (614) 462-6303, or Mr. Bob Fragale of the Ohio Hazardous Waste Facility Approval Board at (614) 462-6981. If you have questions concerning the Federal permit process, please contact your permit-writer in this Agency, or Ms. Kathleen Homer, State Implementation Officer for Ohio, at (312) 886-6148.

Sincerely yours,

Karl J. Klepitsch, Jr., Chief
Waste Management Branch

cc: Paul Flanigan - OEPA
Bob Fragale - HWFAB

053-1c

Green

MAR 31 1982

ENV-TUE

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Robert Mufill
General Manager
Mufill Chemical Corp.
7613 Krick Road
Bedford, Ohio 44146

RE: OHDO01926740
Mufill Chemical Corp.
7613 Krick Road
Bedford, Ohio 44146

Dear Mr. Mufill:

By now you should have received an acknowledgement of our receipt of your Part A permit application material for the above-referenced hazardous waste facility under the Resource Conservation and Recovery Act, as amended (RCRA) permit program. You should also have been apprised of your condition relative to interim status.

Accordingly, this letter constitutes the next step in the formal process leading to issuance or denial of an RCRA permit. Under the authority of 40 CFR 122.22, this is a formal request for submittal of Part B of your application for the above-referenced facility.

Enclosed is a copy of 40 CFR 122.25 which lists the items that constitute a Part B for your facility. Your Part B application must be submitted in quadruplicate and postmarked no later than September 30, 1982. Please send your application to the following address:

RCRA ACTIVITIES
Part B Permit Application
USEPA, Region V
P.O. Box A3597
Chicago, Illinois 60690-3597

We are committed to conducting the RCRA permitting process as efficiently as possible. Consequently I suggest you contact Richard Karl of my staff at (312) 886-7447, as you begin preparing your application. Mr. Karl will be available to discuss specific needs of your application or to meet with you in Chicago. These efforts are intended to generate complete applications, without requiring any information beyond that which is necessary to make RCRA permit decisions.

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While your complete application is due no later than the above date, you are encouraged to submit at your earliest opportunity those components which have been completed. Several interim status documents also are used as components of your Part 2 application. Included are such items as your waste analysis plan, contingency plan, closure plan, etc., each of which may be submitted to this office immediately, to initiate the processing of your Part 2 application.

Failure to furnish your complete Part 2 application by the above date, and to provide in full all required information, is grounds for termination of interim status under 40 CFR 122.22.

Information you submit in the Part 2 application can be disclosed to the public, according to the Freedom of Information Act and U.S. Environmental Protection Agency (USEPA) Freedom of Information regulations. If you wish, however, you may assert a claim of business confidentiality by printing the word "Confidential" on each page of the application which you believe contains confidential business information. USEPA will review business confidentiality claims under regulations at 40 CFR Part 2, and will later request substantiation of any claims. Please review these rules carefully before making a claim.

We have also enclosed a copy of 40 CFR Part 264 which includes technical standards for the operation of treatment and storage facilities. These standards will become applicable upon issuance of a permit to your facility by USEPA.

We will coordinate review of your application with the Ohio Environmental Protection Agency and the Hazardous Waste Facility Approval Board, and if your application is acceptable, will strive for a simultaneous issuance of Federal and State hazardous waste facility permits. It is possible that during the processing of your application, the State hazardous waste program may become authorized to issue RCRA permits for your type of facility. In that case, direct Federal processing will cease, and the State in lieu of USEPA will make the final determination on your application.

We look forward to receiving your Part 2 application.

Sincerely yours,

Karl J. Klepitsch, Jr., Chief
Waste Management Branch

Enclosures: 40 CFR 122.25
40 CFR 264

cc: Emory Hukill

Paul Flanagan, DEPA
Peggy Vince, HWFAB